INTERSTATE MEDICAL JOURNAL.

Vol. XV. DECEMBER, 1908. No. 12

EDITORIAL.

ETHER DAY.

The temper of the age is no longer content with short and pregnant passages descriptive of arresting events in the domain of science. A fuller expression is demanded so that an avenue of approach may be effected by which the great significance of an event shall stir to enthusiasm. That the right express to thought can be given only when a multitude of words are used is, in ordinary circumstances, a foolish axiom that would not be long in inviting criticism; but when the matter in hand is of the importance of the epoch-making discovery of ether, the address delivered by Dr. Welch at the Massachusetts General Hospital on the sixty-second anniversary of Ether Day, though open to the charge of redundant verbiage, has to its good the exalted virtues which pertain to all writings that attempt to illumine those whose tranquil acceptance of occurrences proclaims for apathy.

To estimate aright what is significant or insignificant in the province of facts does not require animation pushed to violence but a critical attitude endued with aims to emphasize where emphasis is necessary so that an irresistible stimulant to activity may be given. And surely the discovery of ether should be treated animatedly by any lecturer who is cognizant of the dire state of affairs that existed when a surgical operation was not unlike to the torture scenes of the Middle Ages in the halcyon days of the thumb-screw. It is not necessary to hark back many years to a time when "they strapped a man to a table, gave him a bullet to clench in his teeth and let him groan and flinch" during a surgical operation. For there were no anesthetics, antiseptics, or arterial forceps at hand; and though sympathy from the surgeon must have been forthcoming, the vain and delusive attempts to alleviate were the sort which to-day are tabooed in the operating room for the reason that they interfere with the sureness of the surgeon's hand. Medical statistics

are not at hand to enlighten us as to the atmosphere of pain as it then was in the operating room, but general literature has enough to show of the pre-ether days to prejudice us for the improvements which are now ours to abate suffering instituted by necessary operations. In that very pathetic tale by Dr. John Brown, "Rab and His Friends," there is sketched in no unworthy way the heroically suppressed physical suffering of James Noble's wife, Ailie, who with true Scottish fortitude and courage to face the inevitable, submits to one of the most painful operations known to surgery—the removal of a cancerous breast—without so much as a rebellious murmur to indicate that there must be something awry in a profession that lacks the wherewithal to mitigate human torment. This mastery of nerves, as shown in the character so graphically drawn by Dr. Brown, but illustrates a species of martyrdom which must have been most pleasing to the surgeon of those times, for it meant a quiescent condition greatly to be desired.

That the fictional character of whose sufferings we have given a glimpse had its counterpart in reality, is instanced in the recently published autobiography "Father and Son," by Edmund Gosse, for here we have a human document illustrative of what may not have been expected, but was exacted by the patient herself—it was the poet's mother—to combat any, or the least, thought that there might be a weakening of the mental powers in face of suffering. Now though these two citations are well enough in their way, and indicate the lengths to which both mental and physical endurance can go, we should not forget the harrowing scenes in the operating room in the first half of the eighteenth century—scenes made possible, or rather inevitable, by a weakness of willpower which to-day, thanks to our humane inventions, is regarded in the light of the usual.

In the welter of argumentation called forth by the advocacy or denunciation of modern scientific theories, the human mind is apt at times to lose its moorings in the tableland of sanity and drift in the wake of frenetic enthusiasms. Convergent imaginations of the intemperate sort are prone to give an exaggerated complexion to discoveries whose importance, as later on ascertained, did not merit their fanfaronades of tutorial indiscretions. That these are misdeeds goes without saying, for not only do they upset the judgment of those who are eager to acquire knowledge in the service of human progress, but by dwelling continually on the present, and even on what the future has in store for mankind, an obliteration of the great scientific red letter days of the past occurs, with results that make for a deplorable disregard of the evolutionary processes. And of all the links in that endless chain which has for its high purpose the unremitting combat against pain and suffering, no stronger

link was ever forged in the past or can be in the future, no matter how great the scientific ingenuity, than the discovery made some sixty years ago by the obscure dentist, Horace Wells; for after its advent surgery, which had been the Cinderella in the medical household, leapt by quick stages into a lusty being of justifiable pretentions whose associations were no longer the barber and the quack.

THE APOSTLE OF RACE IMPROVEMENT.

The attitude of the scientific mind of to-day is tinged with an optimism that should be a decided uplift, not only to the younger men in the medical profession, but even to the older ones who, on account of the vicissitudes incidental to the drudgery of general practice, occasionally view our present advances with considerable pessimism. The long and stubborn fight against disease is yielding us not undeserved guerdons; and though some may think this to be the note of the day, there are others who are not content with this hand-to-hand fight, but are working or writing on lines which have for their object the introduction of important means by which life may be prolonged, the race improved, and the conservation of the mental powers effected, so that many diseases which to-day are dismissed with the rather flippant remark that they must obtain according to the order of nature shall, in the near future, be unknown even to him whose pride it is to proclaim, that in his long and varied career as a medical practitioner, he has seen every disease known to man. That the tendency of the times should be fraught with the exalted purpose to prevent what is often thought to be ineradicable in our defective mental and physical make-up, ought to be subject for congratulation with all of us; and since the seriousness of this tendency is at present being abetted by men of the best mental calibre throughout the world, we cannot but hearken to their various messages. Quite recently four books* and one lecture,** all of exceeding interest and of prime importance as expressions of the main-currents in the science of medicine, have told us that by exercising a scientific spirit prior to the appearance of what are now thought to be inevitable mental and physical disturbances, great good can be accomplished. Of the four books, the one just published by Mr. Francis Galton ranks highest, for in it we have his latest ideas about his arresting theory of Eugenics.

*Memories of My Life. By Francis Galton, F. R. S. London: Methuen & Co. The Age of Mental Virility. By W. A. Newman Dorland. New York: The Century Co. The Problem of Age, Growth, and Death. By Charles S. Minot. New York: G. P. Putnam's Sons. The Prolongation of Life. By Elie Metchnikoff. New York: G. P. Putnam's Sons.

**There is no Decay: a lecture delivered by Robert Ross of the Old Bluecoat School, Liverpool, on Feb. 12th, 1908. Liverpool: The Northern Publishing Company, Limited.

Students of Charles Darwin's works will have no difficulty in recalling his elaborate theory of Natural Selection and the sensation it occasioned throughout the scientific world at the time it was expounded. One would have thought, to judge from the mass of controversial outpourings published at the time, that the whole human race was in danger of undergoing such radical alterations that a complete mental and physical change for better or worse, would be effected. The majority was decidedly against the proceeding because it felt, with an intuition almost divine, that the interference with the laws of nature was a prerogative which had belonged to man for ages, and should not be disturbed because a visionary naturalist saw fit to subvert the mighty structure builded of customs, laws, and social restrictions. The infinitesimally small minority raised its voice in praise, only to meet an opposition whose echoes are with us still. Thus Natural Selection as a factor in the evolutionary processes of the human race went the way all theories go when the dominance of conventional minds is allowed to subdue a clarion note trumpeted forth by an untrammelled scientific mind!

Divorcing ourselves from the marl of heated controversy occasioned by the Darwinian theory, and passing into the clearer day where things can be seen aright, we must recognize as medical men that Natural Selection, while imbued with ideas that were sane and sound, really gave too much leeway to those whose judgment was not strong enough to weigh carefully the reasons for or against alliances that would work weal or woe for the human race. To assist in the endeavor for a betterment of racial conditions by checking the birth-rate of the Unfit and encouraging early marriages of the Fit, is Mr. Galton's serious thought to-day; and though his theory of Eugenics, or Race Improvement, is an interference with the dictates of nature as promulgated in that sociological Magna Charta, Natural Selection, the interference is not to be deprecated, for it means so thorough an education of all the various peoples that make up the world that in due course of time the Fit will dominate the Unfit. When this occurs the benefits reaped will be many, and though the complete suppression of the Unfit may never take place, there will be enough of good coming out of the theory to gladden the hearts of all physicians who to-day are mere sway boats when decision and candor are demanded of them in vetoing a marriage that can only be productive of evil to the race.

Mr. Francis Galton, rightly enamored of a theory that would, if put into complete operation, solve the most distressing medical problems which assail us to-day, illustrates in his old age—he was born in 1822—a mental virility and an unquenchable optimism that should inspire us with new, and somewhat startling, thoughts. For upon reading his auto-

biography what immediately occurs to one is that the age we live in cannot be so defective as the advocates of a decadent critical vocabulary would have us to believe, since it has produced not only one but many outstanding figures of Galton's exceptional intellect and deep interest in human welfare. Surely both Dr. Newman Dorland and Robert Ross have interpreted aright the true feeling of modernity; the former, in his excellent book with its strong plea for a just appreciation of the mental vigor of our intellectual giants in their old age; and the latter, in his refusal to believe that our age is less productive than former times, just because a few critics are purblind to its scintillations, and cry "decay" on account of a deplorable habit of regarding all modern progress as a Barmecide feast.

THE "AMERICAN WOMAN:" THE TYPE THAT IS A SOCIAL MENACE.

The broadside of scathing criticism, which was printed in the London *Spectator,* October 3d and 9th, on the subject of the type of American woman who carries destruction in her path, inasmuch as her philosophy of life is one of ease and luxury with scant notions of her duties as wife and mother, has attracted no little attention; for its author, Dr. Andrew Macphail, of Montreal, steeped his pen in enough trenchancy and causticity to evolve a picture whose bold, broad lines are an effective reading into a type of woman, the widening circle of whose undesired influence has been apprehended by us for some time. Were this influence limited to a small minority it would not be difficult to traverse Dr. Macphail's contentions; but with our knowledge of the large number of American women who arbitrarily limit the number of their children to suit their whims and fancies, it behooves us to admit that in the main the author of the biting criticism is no follower of an *ignis fatuus* born of a crotchety brain, but the seeker after a truth whose ghastliness cannot but bias medical men against a product our social *laisser-faire* has allowed to spring up. And that the product is suffered to grow without let or hindrance is indeed deplorable, for not only are its reprehensible practices a reflection on the whole womanhood of America, but before long the stamina of the nation will be imperiled, inasmuch as a habitual interference with nature must needs be inimical to the bearing of healthy children.

Fortunately for the conscience, if not already for the health of the nation, there is an awakening even with us to the evils which have emanated from that extraordinary phase in our lax sociology—the

"American woman." Two expressions* of late, from sources which cannot claim the slightest connecting link, indicate that the placid thought which has hitherto obtained in face of the complete management of the American family by the "American woman," is passing into a state of censoriousness that has all the good attributes necessary to an attack with foils without buttons. Persuasive words, influenced by a Puritanism that refuses to realize the full extent of the evil, are no longer the means by which writers and medical thinkers approach this social canker in the hope of reform; and when we remember how futile have been all attempts at coercing into some semblance of control, the vagaries of vain and self-sufficient women, by kindly advice only occasionally flavored with strong admonition, the cogency of the briefs which both Dr. Dorsett and Mr. Robert Herrick hold, is warranted by reason of the fact that to drive a matter of prime importance home there should be no mincing of words lest the sentient beings, who unfortunately control public opinion, might take offense. When a menace reaches the gigantic proportions mentioned by Dr. Dorsett in his paper—100,000 abortions are annually committed in New York according to a statement of Justice John Proctor Clark—the pause that is given us has the silences which result when a sense of shame is so deep that even a slight rebuttal on the score that a statement might be exaggerated, never occurs to us.

Though the excellencies of Dr. Dorsett's paper will not reach the general public despite their energy of thought and undeniable powers of logic, Mr. Herrick's book will be the right sort of missionary provided the reader, whether gentle or truculent, regards the plot as of secondary importance, and its well-expressed philosophy the message the secular mind is standing in need of. For with an art that is never prurient he unfolds the sickening tragedy of American family life resulting from the supineness of our moral castigators, so busily engaged elsewhere with problems which do not concern them, and the ascendency of a theory of life that has the blighting characteristics of those who walk in the counsel of the selfish.

---

*Criminal Abortion in Its Broadest Sense. Chairman's address before the Section on Obstetrics and Diseases of Women, of the American Medical Association, Chicago, 1908. By Walter B. Dorsett, M. D., St. Louis.—Together. By Robert Herrick. New York: The Macmillan Company.

OPINION AND CRITICISM.

IN THE SERVICE OF TRUTH.

In the onward sweep of civilization, with its mighty educative forces as a means of elevating the backward thought of the benighted to the pellucid atmosphere of the stringent social and political laws of the Anglo-Saxon, there is never a thought that perhaps the sudden uprooting of barbaric tares may be the cause, not only of considerable physical discomfort and mental anguish, but of the dissemination of certain undesirable diseases which a kind Providence has made concomitants of the highest form of civilization. A case in point is the report of the state of affairs in Uganda, embodied in a paper recently read before the United Services Medical Society by Colonel F. J. Lambkin, R. A. M. C., and which illustrates most graphically the radical physical changes which have taken place in the Baganda tribe, due to the enforcing of the tenets of Christianity on a people who in their blindness had seen fit to keep their womankind under strict surveillance. With our knowledge of the degeneracy of the Red Man, directly there was grafted on him the subtleties of our social advancement, and the unwelcome acquaintance the inhabitants of outlying districts in the Philippine Islands made with venereal diseases, following the advent of the American soldier, it is not difficult to guess what the real causes are that at present are undermining the health of an intelligent tribe, who instinctively knew that semi-servitude of their women folk meant the sort of chastity in consonance with their barbaric ideals. But with the arrival of those who spread the Word, social customs which had obtained for years were overturned, and to-day England sees the spectacle of a once happy but irreligious people chastened by promiscuous sexual intercourse and the best species of immorality. In fact so thoroughly imbued are the women with the social rights that inhere in emancipation, and which were made clear to them in all their many ramifications by missionaries who could not for a moment abide the social degradation, that in some districts (Ankole) "it is estimated 90 per cent. suffer from syphilis, and 50 to 60 per cent. of the infant mortality is ascribed to the same cause."

What strikes us at once upon reading Colonel Lambkin's paper is the dire results which only too often are born of zealotry. Religion as a factor in civilization is not to be despised when it limits its beneficent offices to a spiritual uplift for those whose education is somewhat ready for its many intricacies, but when it is manipulated by fanatics who are ignorant of ethnology and what a sudden subversion of social customs really means for a people easily allured by promises and sophistry, it is

baneful to say the least. That it has much to answer for when it is used merely as a coercive agent in undoing what aeons have made part and parcel of the national life of a people, has been instanced many times before in history; but that these very modern days, so eager in the praises of all researchers who are endeavoring to stamp out diseases, should be darkened by a wantonness as illustrated in the dire conditions of Uganda, makes us doubtful of the efficacy of that much-lauded progressive spirit which, we are told, stands for complete liberation from the shackles of any religion.

MUSIC AND ITS EFFECTS ON THE SICK.

Quite recently there has come to us the intelligence that a well-known New York specialist who was supposed to be in the last stages of an incurable disease was so much benefited by the alluring tones as they issued forth from the throat of a celebrated singer, that a decided psychical change for the better became manifest at once and even the disease lapsed into a state of encouraging quiescence. All of which opens a vista that has illimitable length and breadth in its application as a comparatively new agent in the temporary control, if not the ultimate cure, of disease. Now although music of the instrumental sort was used with some success in a London Hospital a few years ago—patients of an emotional temperament were the subjects—the combined presence of an attractive woman and a vocal art in its best estate for abating certain symptoms peculiar to malignant growths, is indeed an innovation in therapeutics, and should be hailed by the staunch advocates of therapeutic nihilism as a discovery that has all the fascinations of palatability denied the stronger drugs. But though the ease with which this new therapeutic measure may be applied cannot be questioned there is a rift nevertheless in its perfectibility for if inattention is paid to the nationality of the patient, dire results may occur. What German, no matter how great his admiration of other music than his own, would be able to withstand the deleterious effects of French music of the Offenbachian sort when his temperature is abnormal? On the other hand what chauvinistic Frenchman would reckon his pain less when influenced by the mighty strains of Wagner's "Goetterdaemmerung?" Again it does not require the imagination of a lady novelist to picture the real anguish of an Italian patient in the throes of renal colic when assaulted by the innocuous and mildly inspired airs from Sullivan's "Pinafore" or "The Mikado." And furthermore what gyrations, on the part of those whose nerve ballast has been destroyed through long vigils accompanying physical anguish, would not be indulged in following the close application of selections from Charpentier's "Louise" or the terrific modern symphonic poem, Strauss' "Thus Spake Zarathustra!"

That music of a high order has a soporific effect on individuals who have only predilections for the less exalted music hall brand, has been brought home to us repeatedly at various symphony concerts; but what is important to remember is that though Berlioz and Beethoven may be a gratifying source of assuagement for nerves harassed by mercantile cares when the physical and mental conditions are normal, as we take them to be especially with the male part of a concert assemblage, it is wrong to infer that in the sickroom the same somnolent effects would be achieved. For it is within the bounds of reason to know that no supersession of pain by something milder could possibly follow a partial understanding of a musical theme with which the individual is completely out of sympathy on account of national traits and an abnormal condition. In fact the mental strain involved in compelling the already wearied brain to grasp the purport of a musical message would indicate that as yet, though psychotherapeutics is looming large on the medical horizon, the musical feature which might soon be included in this treatment, should be withheld, at least until such time as the musical education of the ordinary Anglo-Saxon equals his literary and scientific knowledge.

LITERARY NOTES.

It is in the nature of things, as they touch both medicine and literature, that certain medical minds should employ themselves with the solution of the problem of how it happens that some writers of fiction have a deep knowledge of medicine while others are ridiculously deficient. Dr. Pierre-Yves Even in his Paris thesis, "A Study of Edmund and Jules de Goncourt," lays bare the mental and physical sufferings of the two writers who were the protagonists of the naturalistic school of fiction, and shows in a scientific spirit what introspection of one's own physical disabilities and mental abnormalities may do as a means to an end,—the end in the case of the Goncourts being so thorough a transcription of their aches and pains to the pages of their books that a decided medical verisimilitude is leant them. That a full knowledge of medicine can be gained in this way would be straining the contention too far; but that it may be an excellent thing for the tyro of fictional writing to study his own deviations from normal health so that if he desires to make a character slightly abnormal, the means will be at hand to transcribe his own sufferings to his pages, even though the character is no pen picture of himself, is a step towards a happier state of medicine than occurs to-day in the world of fiction. The *British Medical Journal* in a recent issue gives many startling medical excerpts from novels, which show to what lengths a perverse education, presumably derived from the time-honored volume dear to all households, "The Family Doctor," will carry even recognized writers. In a novel recently read by us, "The Worldings," by Leonard Merrick, there is an interesting conversation between the

doctor and the hero, from which we learn that a pneumonia, as it affected a worried old man, must have been brought on by anxiety! And yet this writer has received unstinted praise from Mr. William Dean Howells for his exact and remarkable photographic art in reproducing unexaggerated pictures of life.

In the new edition of his Bordeaux thesis, Dr. A. Chabé has added a chapter to the history of French ophthalmology by describing, in an erudite manner, the evolution of Bordeaux ophthalmology, from its earliest empirical beginnings in the Christian era until the present time,—a period that has many savants who do honor to the specialty. Aside from its literary and scientific value, its anecdotes are not only curious but of remarkable interest to the antiquarian. One of the first oculists of Bordeaux was Marcellin, the Empiric, who was born at Bazas and lived in the middle of the IVth century. He was the author of a book entitled, "Liber de medicamentis," published at Basle in 1336, which shows that he was deserving of his surname. Here are some of his choice pearls of wisdom: 1st—To evade, throughout the year, ocular pains, when cherries are luscious and most tempting to eat, crush three cherry stones, spread them on a piece of linen to make an amulet, but before wearing the amulet turn towards the Orient and make a vow not to eat cherries during the year. 2nd—Hold a fly with the left hand and whilst holding it mention the name of the invalid and say you are holding the fly to cure his eyes. Then place it between the folds of a piece of linen; suspend the same from the neck of the invalid and do not forget to look straight ahead, and not behind, while placing this amulet. 3rd—Do you wish to cure at once a person affected with pain in the eyes? Place around his neck a piece of linen having as many knots as there are letters in his name. Remember to pronounce each letter of his name while making the knots. 4th—One who has eaten a morsel of boiled stork can not have a blepharitis during many consecutive years. 5th—In case you see a shooting star, count rapidly until the star disappears. The number reached before its disappearance will indicate the number of years that shall elapse before you have a blepharitis. 6th—For foreign bodies in the eyes, produce a slight friction by gently passing the thumb and medical finger (the ring finger) three times over the open eye, saying each time a pass is made: "I embrace the head of Medusa." 7th—If there is a stye on the right eye hold (?) it by means of three fingers of the left hand, and standing in the open air, with looks turned towards the Orient, say: "Since stone is hard and dry and not covered with fleecy wool, so shall this stye remain hard and dry and finally dry up altogether."

ORIGINAL ARTICLES.

CONSERVATIVE METHODS OF TREATMENT OF THE INFLAMMATORY DISEASES OF THE TUBES.

By Palmer Findley, M. D., of Omaha, Neb.
Professor of Gynecology, College of Medicine, State University, Nebraska.

The object of practicing conservatism in operating upon the Fallopian tube is to maintain or provide for the function of child bearing. The one function possessed by the tubes is that of transmitting the ovum from the ovary to the uterus.

It was formerly the custom to remove the tube altogether with the ovary, but it has been repeatedly demonstrated that the ovum may pass from an ovary to the tube of the opposite side and there be fecundated, and either remain in the tube to develop a tubal pregnancy or pass through the tube to the uterus, there to develop a uterine pregnancy. From these facts we have learned to conserve the normal tube and even a small portion of the uterine end of a normal tube when the ovary of the corresponding side has been wholly sacrificed and there is left all or a part of the ovary of the opposite side.

The surgical axiom, "save what can be saved," applies to the surgery of the tubes when the uterus and at least a part of one ovary is left intact. When the body of the uterus or both ovaries are removed the tubes can serve no good purpose.

In Tubal Pregnancy there is no place for conservative dealing with the pregnant tube. It should be removed en toto.

Chronic Inflammatory Diseases of the tubes afford great possibilities as well as great uncertainties in conservative operations.

We have learned from experience that simple catarrhal inflammations of the tubes, when treated tentatively, not infrequently resolve into a normal state. More than this, it has been observed that purulent infections of the tubes may eventually cease to inconvenience the individual and may not interfere with the occurrance of pregnancy. This, however, is not to be reckoned with.

I have had one case of bilateral pyosalpinx which was under treatment by douches and tampons for a year and which subsequently bore a child and with no untoward results. Martin reports two such cases.

How frequently we observe cases in the acute and subacute stages of a pelvic infection with the uterus and appendages matted, and pus in and about the tubes. We have seen these cases and believed them to

be hopelessly involved; yet under tentative treatment they have ceased to create disturbance, and have been so nearly resolved to the normal as to call for little or no surgical interference.

It therefore behooves us to be guarded in surgery of the tubes lest we remove that which may serve a good purpose.

Adhesions about the tube may be severed without sacrificing the tube provided the lumen of the tube is patent and the endosalpinx is normal.

Where the fimbriæ are matted, and serous secretions have accumulated in the tube without altering the structure of the tube wall, the fimbriæ may be teased apart or the fimbriated end resected. Kelly refers to the possibility of accidentally opening an avenue for the infection which has been pent up in the tube, permitting escape into the peritoneal cavity and with an occasional fatal result. The possibility of such an event should lead one to exercise the greatest caution. Wherever there is a possibility of a latent infection resident in the tubes no such conservative measures are permissible.

Clarence Webster resected the fimbriated end of a tube and at a later date found, upon opening the abdomen, that fimbriæ had reformed at the resected end of the tube.

The effort has been to conserve part or all of the tube distended with pus, blood or serum. Stripping the tube of its contained blood or pus and irrigating the tube with sterile normal salt solution by means of a small canula inserted into the abdominal end of the tube has been advised and practiced by a few operators. Such conservatism is not justified.

Benign tumors of the tube, notably fibromata, have called for resection of the tube at the proximal end of the tumor. Such opportunities have been rare, for reason that these tumors are seldom found.

1. *Acute Salpingitis.* The treatment of acute inflammations of the tubes is essentially that of acute pelvic inflammation in general. Rest is enjoined in view of limiting the infection to the tube and preventing its spread to the neighboring structures. Manipulations of the tube in the early stages of infection are dangerous because at such times the abdominal end of the tube is not securely closed and the infectious secretions may be stripped from the tube into the pelvic peritoneal cavity. For this reason no unnecessary pelvic examinations should be made, and all operative measures should be proscribed unless drainage per vaginam is demanded for the relief of septic intoxication and pain. Depletives, notably hot vaginal douches and glycerine and ichthyol tampons, should be used long after the acute inflammatory reaction has subsided. If these methods are persisted in the results will often be most gratifying. The progress of the infection may be checked, exudates within the lumen of the tube and tube wall may be absorbed and if the inflammatory process has not gone on to the destruction of cellular elements and the building up of newly formed connective tissue, it is possible that the

tube may not only be restored to functional activity, but to a perfectly normal anatomical condition.

In addition to the application of douches and tampons hot hip packs, hot fomentations and ice bags are of service in relieving pain. The diet should be light and nutritious and the bowels kept freely open with saline cathartics and enemata. As a rule anodynes are not demanded. Where septic symptoms are manifest enemata of normal salt solution will lessen the toxic symptoms and greatly add to the comfort of the patient; the functions of the bowel, skin and kidneys are accelerated, the disturbances of the stomach due to toxines are alleviated and pain is lessened.

Freub of Amsterdam reported 70 per cent. of cures of salpingo-ovaritis without operative intervention. In these cases the uniform treatment was as follows: "Complete rest in bed and the application of an ice bag as long as there was any fever; the acute symptoms past, warm vaginal injections (45 degrees centrigrade), vaginal tampons, glycerine and warm water compress on the lower part of the abdomen. The duration of the treatment varied from three weeks to several months; the average duration could be rated at about six weeks." The author does not claim complete cure in all of these cases. In all cases the women were wholly relieved of their symptoms. In a limited number of these cases, numbering 433, there were slight relapses.

Freub holds that over one-half the cases of salpingo-ovaritis necessitate no operative interference.

Chronic Salpingitis. We ask, should all tubes, the seat of chronic inflammation, be sacrified? This has been and is to-day the general practice, but in view of the fact that so large a percentage of these cases are brought to the state of functional cure by the exercise of conservative measures it is apparent that surgery should not be invoked until non-operative means have been given an extended trial. Surgery cannot replace a diseased tube by a normal tube, hence it follows that the removal of an unoffending lesion of the tube can serve no good purpose.

The severity of the symptoms in no way correspond to the extent of the lesion in the tubes. There may be an accumulation of pus in the tubes, in the absence of symptoms, and there may be serious complaint from an apparently insignificant lesion.

As a general proposition we may say that so long as a salpingo-ovaritis lets the patient alone we should let it alone, so far as surgery is concerned.

In the chronic stage of salpingitis the treatment is directed toward the relief from annoying and distressing symptoms, and so far as possible to the restoration of the diseased tube to the normal. When these efforts, faithfully and intelligently directed, have failed to bring about the desired results, it is time for surgical intervention, but not until then.

The conservative measures applied in the treatment of chronic salpingitis are as follows: Vaginal douches of water at 110° F., twenty minutes in duration and repeated twice daily, are given in the recumbent position. Glycerine (93 parts) and ichthyol (7 parts) tampons are applied daily.

Combination of the douches and tampons affords the most effective means of depleting the congested pelvic tissues. Under this treatment tenderness and pain are relieved, inflammatory swellings are reduced and the functions of the tubes and neighboring organs are in part or wholly restored. Under this treatment, extending over a period of one year, I have seen a case of bilateral pyosalpinx arrive at a functional cure and to the degree which provided for pregnancy and a successful delivery. Pelvic massage properly directed and persisted in for the requisite time will bring favorable results in selected cases, but in America this method of treatment has found little favor. I have personally found little satisfaction in it.

Pressure therapy is of still less value in the treatment of salpingitis because of the high location of the tube. Freedom from violent exercise and the careful regulation of the bowels should be enjoined.

A CASE OF PERSISTENT SINUS AFTER NEPHRECTOMY.*

By Walter C. G. Kirchner, M. D., of St. Louis.

The case which I shall report is interesting because of the symptoms which it presented following in the course of several operations. The patient entered the hospital for the purpose of having a sinus on the right side of the abdomen removed. The history of the case offered opportunity for an interesting study, and made it difficult to determine the exact origin and cause of the sinus.

The sinus opening was about three fingers' breadth below the costal margin at the outer border of the right rectus muscle. Here there was an oblique abdominal scar. A probe inserted into the sinus tract took a direction toward the kidney, and there was also a tract leading toward the pelvis. There was a moderate amount of discharge from the wound. The patient said that the sinus had persisted for more than a year, and that its presence annoyed her greatly, the condition requiring frequent dressings and interfering therefore with her comfort.

Patient stated that on October 22, 1906, while in Boston, she was seized with pain at four o'clock in the morning, and was unable to get out of bed. The body and limbs seemed stiff. An hour and a half later she began to vomit copiously and had to urinate frequently. The persistent vomiting and frequent urination continued during a period of three days when she decided to return to her friends in Ohio. She was scarcely able to walk, but on arriving at her destination in Ohio was received at a hospital. The physicians there decided that immediate operation was indicated. She thought that at that time she had some fever. The condition seemed so urgent that an operation was performed, the diagnosis, according to her statement, resting between gall-bladder trouble and appendicitis. At the operation, it was stated, a large pus cavity was encountered, and it was thought that this had communication with the region of the appendix and that the surgeons were dealing with an appendiceal abscess.

Drainage had been instituted, gauze drains later being replaced by rubber tubes. At first there was a copious discharge of pus, but later clear fluid escaped. The patient stated that she thought that in quantity about thirty-four to thirty-six ounces of urine were passed daily. The discharge of fluid from the sinus was so annoying that five months later a second operation was contemplated. The patient had been given methylene blue which showed itself in the fluid coming from the sinus. The urine was only slightly colored blue. Cystoscopic examination re-

*Read before the St. Louis Medical Society (Surgical Section), October 24, 1908.

vealed that urine was coming from the left ureter but none from the right. It was thought best that an operation on the kidney be performed, and this organ was consequently removed. The patient was unable to state whether or not the kidney was diseased.

After the nephrectomy the copious discharge of fluid from the sinus ceased, but the sinus tract itself persisted and the discharge of pus was kept up. In this condition the patient presented herself for a cure.

Upon further questioning it was learned that the patient was thirty-two years of age, that she was unmarried and that she had always enjoyed good health. She stated that she had never been sick. She was a seamstress and was regular in her habits. She had never had a cough, nor had she ever complained of any bladder or pelvic trouble. At no time was there blood in the urine. About six years ago the patient first noticed discomfort in the right side which was referred to the kidney region. The back would become stiff, and this stiffness and rigidity seemed to affect the right limb. The pain would most frequently come on at night time, and she found it necessary at such times to sleep in a sitting posture. The pain usually would wear off in about half an hour, and it was never so severe as to keep her from her daily duties. These severe attacks of pain would come on perhaps every three or four months, usually after doing some heavy work such as lifting or washing. Although the patient would take exercise occasionally, she never felt comfortable while wearing a tight corset.

The pain which usually came on at night when the patient was on her back was of an aching character and was relieved by pressure over the kidney region. It produced a sickening sensation in her stomach, and she would at such times vomit continuously, sometimes these vomiting spells persisting during a period of a week. Vomitus was greenish in character. At no time, however, was there fever.

She had had three very severe attacks which were about three months apart. The pain was located in the small of the back, and did not seem to radiate nor to extend down into the groin. The question of floating kidney had been considered, but this diagnosis had never been verified by any of the physicians whom she had consulted. The pain was usually ascribed to lumbago or rheumatism, but it was not relieved by the usual antirheunatic remedies. The patient had noticed that during the attacks of pain she urinated more frequently and that also it seemed to her that the quantity was greater than usual.

With these facts before us we performed a third operation for the purpose of removing the sinus tract, not knowing exactly whether this originated from the kidney, the gall-bladder or the appendix.

Under general anesthesia, incision was made along the outer border of the right rectus muscle. The sinus was plugged with gauze, and the skin margin sewed over the sinus to prevent soiling. With great care the sinus tract was isolated, and the intestinal and omental adhesions broken up. The denuded peritoneal surfaces were covered over with

Lembert sutures. The appendix was found involved in a few adhesions, apparently, however, normal in character, and was removed, the stump being buried in the cecum with purse string suture. The gall-bladder was examined, and found in normal condition. Clamp placed at the base of the sinus tract, one portion of which led to the renal vessel. The other portion communicated with the right ureter, and was ligated and severed. The mass was then easily removed, bleeding vessels being ligated and supplementary flank drainage instituted. The abdominal wound was closed in layers.

Examination of the specimen showed it to be an old sac, probably a cyst of the kidney. The patient made an uninterrupted recovery.

From a study of the case it seems that the patient had been suffering for some time from symptoms referable to the kidney, condition most probably being one of hydronephrosis. This condition became chronic, and later, suppuration taking place, the symptoms became so acute that operation was necessary. The operation most probably revealed a large pus sac, which could easily have simulated an appendiceal abscess. At a subsequent operation nephrectomy was performed, a sac, however, having been left in situ, which contributed to the formation of a permanent sinus. The case seems then to have been one of hydronephrosis with subsequent suppurative changes.

EXAMINATION OF THE STOOLS OF INFANTS.*

By John Zahorsky, M. D., of St. Louis.

It is gradually becoming generally recognized that the so-called curds in the stools of infants are not casein coagula but soaps. Repeated analysis has shown that these curds are composed principally of the fatty salts of calcium.

It occurred to me that it would be valuable to have some clinical tests by which the "curds" of soaps and the "curds" of casein could be readily distinguished; for it must be admitted that their gross appearance is very deceptive. Numerous tests and experiments were made to find a reagent which would promptly reveal the nature of the curd, but in many instances, owing to the composite nature of the coagulum, the reactions and tests were somewhat doubtful, hence it is necessary to try several tests in order to reach definite conclusions.

I.

Appearance. The curd composed of soaps is more granular in appearance and can usually be readily crushed with a spatula.

Formaldehyde. If a coagulum of casein is placed for several hours in a strong solution of formic aldehyde it becomes tough and leathery. A lump of calcium soap is not hardened to any appreciable extent by this process.

Solubility. A lump of calcium soap is almost completely soluble in absolute alcohol to which about 10% of hydrochloric acid has been added. The casein curd is not affected by this menstruum. If a suspicious lump is taken from the stool, first thoroughly shaken with petroleum ether, which removes the fat and fatty acids, then decanted, a considerable residue remains. Hot water removes an additional quantity (soluble soaps). Finally, acid alcohol may be used which removes the insoluble soaps. After this a small residue remains varying in amount in different stools. The nature of this residue was not determined; probably it consists of bacteria, cells, mucus and rarely casein.

Stains. An attempt to find a specific stain among those ordinarily found in a clinical laboratory, met with partial success. I found iodin a very reliable strain. The mass of feces should be cut in half in order to expose the inner structure. Tincture of iodin is then poured on the masses in a test tube or dish. After ten minutes it is thoroughly washed with alcohol, which almost completely decolorizes the mass composed of soaps but has little effect on the brown-colored casein.

Another stain which may be used is carbol-fuchsin. This intensely stains both soaps and casein masses; in the former the ordinary de-

*Read before the Bethesda Pediatric Society, with demonstrations.

colorizing agents will remove most of the stain, while the casein is with difficulty decolorized. In general the avidity of casein to stains is much stronger than the coagula of stools, which are composed principally of soaps, and the former holds the stain with greater tenacity. By use of these several tests the clinician can with certainty decide whether a certain lump in the stool is composed of soaps or consists principally of casein.

Quite a large series of tests has convinced me that casein coagula in the stools are very rare.

II.

Another interesting phenomenon concerning the stools is the change of the yellow to the green stool. About two years ago I reported some observations with which the conclusions of Wernstedt were not in accord.

The yellow stool owes its color principally to bilirubin. If a mass of yellow stool is shaken with chloroform, this menstruum soon becomes intensely yellow, showing that the coloring matter is dissolved. This corresponds to the properties of bilirubin. But chloroform does not dissolve the green pigment of green stools.

Absolute alcohol, however, dissolves the green pigment, especially if acidulated with hydrochloric acid. A beautiful green solution may thus be obtained. Hence, the green color is probably biliverdin, as has been asserted by several authorities and denied by others.

When a stool showing a slight greenish tinge is exposed to the air it often becomes intensely green. By trial I found that this change to the green color can not be prevented by placing the stool in a covered dish with 40% solution of formic aldehyde. It seems, therefore, improbable that the oxidation of bilirubin to biliverdin depends directly on the activity of microorganisms.

Koeppe* followed Wernstedt's researches but was unable to corroborate his main conclusions that the oxidase depends on mucous corpuscles. He declared that in order to produce the green color a peroxid must be present in the stool, a ferment to decompose the peroxid and a pigment which turns green on oxidation. Koeppe asserts that the addition of peroxid of hydrogen to a yellow stool will gradually turn it green. While this is true in the main, tests show a marked difference in the natural green stool and those artificially produced. Every stool possesses the power to decompose hydrogen peroxid, that is, contains a catalase, hence the ferment is invariably present, and if the pigment is invariably bilirubin, according to the rules of Koeppe, it would seem that the presence of a peroxid would almost invariably induce a change of the yellow stool.

As a matter of fact the most common process in the stool is a reducing process. It is by the reducing action of bacteria that the yellow bilirubin is changed to the white hydrobilirubin which forms the principal pigment

*Monat. f. Kinderheilk., 1906.

of the light-colored and clay-colored stools. Hydrobilirubin is very rarely found in the stools of breast-fed infants, while it is generally present after the seventh day of life in artificially-fed babies. The light-colored stools signify that bacterial decomposition of the intestinal contents has taken place, since reduction processes accompany proteid putrefaction.

Hecht* lays down the rule that the green stools can appear only when the reduction processes in the intestine are hindered in some way. As these reduction processes occur in the large intestine it seems rational to assume that any condition which forces the intestinal contents rapidly through the colon would prevent the reduction of bilirubin and thus give an opportunity for its oxidation. Strange as it may seem then, any cause which diminishes the putrefactive processes in the intestine should favor a yellow or green stool rather than the white stool. It is probably for this reason that green stools follow the administration of calomel and sometimes castor oil.

Wernstedt made the point that the green pigment adhered to the mucus principally, but this has no special significance since Schorlemmer found that mucus has a special affinity for bilirubin.

The actual cause of the green stool is still not clear although we are gradually becoming better acquainted with some of the conditions under which bilirubin is oxidized.

In conclusion, I wish to call attention to the Schmidt sublimate test. If a concentrated solution of corrosive sublimate is added to fresh feces which contain hydrobilirubin, a peculiar red discoloration is produced. This test may be used in differentiating cases of suspected acholia from the very light stools of so-called milk indigestion.

1460 S. Grand Ave.

*Muench. Med. Woch., 1907.

OBSERVATIONS ON FAT-INCAPACITY IN YOUNG INFANTS.*

By A. S. Bleyer, M. D., of St. Louis.

Without clearly understanding in what way the presence of fat in a rational milk mixture can be the cause of vomiting, colic and constipation, I have made it a practice for some time, whenever confronted with a vomiting baby, to remove the fat from the milk, for experimental purposes.

It has seemed to me that where the fat was removed the indication for sodium citrate becomes relatively infrequent, and I do not now administer the soda until I have ascertained if the removal of the fat does not for the moment solve the problem. It is quite certain that there is a group of cases in which either method will meet with equal success. I have seen high proteids well tolerated by vomiting babies upon the removal of the fats.

In practically all of my cases there were large white curds in the stools at some time or other during the vomiting period. I do not know anything of their relation to the vomiting or pain except that of incidence and wish only to state that they were usually present.

As for the occurrence of colic, it was present in most of the cases and was noticed in every one of the five observed in babies exclusively on the breast. What its existence may have to do with the presence of fat in the milk I do not know, nor am I certain that it has any relation whatever, like the hard curds its occurrence is here noted.

In this series there were five exclusively breast-fed babies and about twenty exclusively fed on cow's milk modified. All my cases have been under five months of age. Following are examples of these groups:

J. G., a fine looking exclusively breast-fed baby of six weeks, first seen on December 2, 1907. Mother not neurotic and is intelligent. Baby has been attended for three weeks by two physicians for obstinate constipation and attacks of intense pain, coming on several times every day and lasting for a half hour at a time or longer.

Baby vomits after every nursing, on one occasion three hours afterwards; he often vomits at night. At times he seems to get much relief by this act. The muco-cutaneous region of the anus is violently reddened but there is no intertrigo present. Examination of one ounce of mother's milk expressed from one breast shows 6.1 per cent. fat by the Babcock test; it is not of a normal bluish tint but looks creamy. Since yesterday the appetite has failed, there is an abundance of mucus in the stool and small white masses of rather hard consistence; besides this there are many small masses containing a few grains of yellowish-brown sand

*Read before the Bethesda Pediatric Society on Sept. 25th, 1908.

enclosed in mucus. Examination of these sandy masses shows them to be made up of thousands of hair-like fatty-acid crystals.

Mother placed on a limited fat-free, strictly nitrogenous diet with tea and water and told to take exercise. Each feeding was preceded by a half ounce of weak barley water to which was added four grains of citrate of soda, each nursing from the first milk from both breasts. An enema of saline solution ordered for each morning.

Under this diet the mother's milk diminished in amount of fat to less than half within four days. During nine days there was no improvement in the child and he lost several ounces in weight. On December 11th, the breast was discontinued and a weak mixture of Horlick's malted milk was ordered, soda and barley water stopped. By the end of thirty-six hours the awful crying spells and all pain had disappeared, the vomiting disappeared coincidently, no white masses in stools, no sand. During this week the baby gained five ounces and was sleeping seven hours without awaking at night, the bowels were moving two or three times daily.

In one week it was again attempted to put him to the breast, with however, a return of the above symptoms in great intensity. It was therefore discontinued a second time and the maltose food ordered continued for two weeks longer.

Four months later, *i. e.,* on April 27, 1908, the mother reported that when the child was put to the breast the second time, the symptoms above enumerated failed to return, he now, at six months, weighed 16 pounds and 3 ounces. I regret very much that I did not give a modification of skim cow's milk for this child, for the evidence against the fat, if it is present in this case would then have been stronger.

Another instance of this type in a breast-fed baby was brought to my notice by Dr. Royston, of the Washington University Maternity Outclinic. This was a colored male child of four weeks weighing 7 pounds, 8 ounces. Nursing habits had been good, mother a primipara, breasts were of the conical type and were turgid. Bowels had been moving two or three times daily until past few days when, coincidently with what seemed to be colic, the child had become constipated, the stools had been large, yellow and sometimes slimy: in all the stools during these past days there had been large white lumps. Baby strains at stool, stools seem to have become hard. Examination of breast milk, one ounce extracted from one breast contained approximately 6.6 per cent. fat, that is, the cream layer reached 11 in 24 hours in Holt's creamometer.

Four days later Dr. Royston reported that the baby was very sick, that he was suffering intensely and that something must be done. He was now vomiting every feeding; there had been no stool within two days. Several doses of milk of magnesia resulted in the passage of a very large stool of a coppery color containing many air-bubbles; it smelled exactly like rancid butter and was inclined to be ropy. Unfortunately a fat determination of this stool was not made.

The mother was now placed on a strict diet, the first half of each feeding was taken from both breasts in order to avoid the deeper milk, and fifteen drops of milk of magnesia were administered in a half ounce of sugar of milk water immediately before each feeding.

Three days later examination of the milk gave a reading of 2.5 per cent. by the Babcock test and there had been a satisfactory disappearance of vomiting and pain. This was on September 8th last, and Dr. Royston reports more recently that, save for occasional crying, everything is all right with the baby now.

Following are brief reports of cases of this type fed exclusively on modifications of cow's milk:

Wm. P., age four months, white, seen on the 3rd of this September. For two weeks baby has been taking 40 ounces daily of milk from the laboratory of the St. Louis Pure Milk Commission, containing proteids 1.5, fats 3.2, sugar 6.5, lime water 7, and has been vomiting every feeding.

Dr. Bassett saw this case for me at my feeding clinic and, because of the vomiting and the weight of the infant,—7 pounds 4 ounces,—reduced the percentages to proteids 0.9, fats 2.2, sugar 5.5, lime water 5, giving 36 ounces of food per day; energy quotient of 69 per pound as opposed to 101. This change was made on September 9th and on September 14th the mother complained that there was no improvement in the vomiting; besides this the child was doing a great deal of crying, seemed hungry, was constipated and passed white masses in the stools and had lost 3 ounces in weight.

A prescription for certified milk, of proteids 1.15 instead of 0.9, fats 0.2 stead of 2.2, and sugar 6 without lime water was given. Daily quantity 36 ounces, calories 373, quotient 53 as opposed to 69. Three days later the mother reported with the baby; there was now no vomiting for the first time in four weeks; it had stopped immediately upon the withdrawal of the fats. I did not see a stool but the mother stated that they were moving easily and without any hard masses. This baby was seen again on September 21st and on September 24th; he has not vomited a single time since September 14th and has gained 3 ounces. On the latter date the quantity of food was increased to 1262 grams, containing 598 calories; 1 per cent. of fat was added and one more per cent. of sugar.

The second case in this group is that of M. K. This baby is four months old; he was first seen on July 27th last; he had been attended by three physicians and was in a very bad condition, weight 7 pounds 5 ounces; he had been a vomiting baby from birth. Breast milk had been given for two weeks, then Eagle brand condensed milk in low dilutions, (1 to 10 at two weeks) and later on an unknown combination of cow's milk was given.

At time he was first seen the stools were loose, but there was severe crying at stool; the stools contained small white masses and were slimy. There was a violent redness immediately surrounding the anus but no intertrigo. Because of the marantic condition some maltose was added

to the fat-free food now prescribed, which was as follows, proteids 1.6, fats 0.3, sugar 2.45, Mellin's food 4, daily quantity 36 to 40 ounces, calories 345, quotient 47 per pound.

One week later mother reported at the clinic; vomiting had ceased altogether, the child was very hungry and had lost one ounce; stools loose. No change was made in the mixture and 17 days later the child was brought in showing a gain of 16 ounces. No vomiting, stools loose.

An interesting fact in this case was now brought out; it was attempted to return to a modification of whole milk, the only change being the addition of 2.10 per cent. fat. Contrary to what was hoped for, the child was still incapable of handling the fat and promptly began to vomit. It was decided therefore to return to skim milk and to increase the proteids slightly. When seen on September 21st, the child had gained 38 ounces (*i. e.*, since August 3rd, a period of 49 days) and was consuming 45 ounces of fat-free food daily, calories 793, quotient 84. He is now 6 months old and weighs 9 pounds 6 ounces.

I can not close without drawing attention to a case in this interesting group seen only yesterday, in which the apparent harmlessness of even a high proteid is seen where fat is absent from the milk.

This baby is only 8 weeks old, he weighs 6 pounds 3 ounces, cries a great deal, strains at stool and is constipated; stool exhibits pasty white curds; there is considerable vomiting. He was losing weight on a rational milk mixture containing 498 calories, a quotient of 79, although taking his milk with a ravenous appetite.

Because of the plan to put him on a fat-free milk, the proteids were raised to a little over 2. Sugar of milk was used to bring the sugar to 7, the calories being lowered to 372, quotient 52 as opposed to 79.

I concluded that if this child would gain on a fat-free milk of quotient 52 when he was losing on a milk mixture containing 2.2 per cent. of fat with a quotient of 79, that his case would offer strong evidence that the presence of the fat was interfering with the absorption of his food. After three days, he had gained 2 ounces.

4339 Washington Boulevard.

THE CASE OF JONATHAN SWIFT.

By George M. Gould, M. D., of Ithaca, N. Y.

(CONTINUED FROM NOVEMBER ISSUE.)

"The fierce exercise by which he had striven to defy his torture was now over: he could scarcely be persuaded to move from his chair, and his body, which had shrunk to skin and bone, now recovered its plumpness: the wrinkles left his face, which now, in spite of the thick snow-white hair that overhung it, had an aspect of almost child-like gentleness. Still, his state was one where controlling and guiding power was wanting, rather than one of ordinary insanity. He "never talked nonsense nor said a foolish thing." He was very "quiet and peaceful." (74.)

Sudden Sickness and Sudden Wellness. When a patient, for long periods or for a life, has constant "ups and downs" of health, the disease is plainly functional for the most part, and evidently depends upon some fundamental cause which is subject to variableness, now normal, now morbid. When the symptoms of such a patient are those well-known by all good oculists to be produced by morbid function of the eyes, and when they are relieved completely by cessation of the morbid function, i. e., "near-work," the diagnosis makes itself: unless the professional diagnostician knows nothing about eyes, and because of venial and deadly sinning disbelieves in eyestrain. The striking and often emphasized nature of "migraine," periodicity, with sudden illness, culminating in crisis, followed by sudden clearing up and perfect health, makes it the example *par excellence* of all such diseases. In Swift's case the phenomenon is almost ideally "typical:"—

"I have had my giddiness 23 years by fits." (45.)

"Mr. Lewis assures me that you are now well." (45.)

"Swift is in perfect health and spirits, the joy of all here who know him, as he was eleven years ago." (57.)

"I have recovered my hearing for some time at least, recovered it so as not to be troublesome to those I converse with, but I shall never be famous for acuteness in that Sense, and am in daily dread of Relapses." (57.)

"My deafness has left me above three weeks, and therefore I expect a visit from it soon." (57.)

"I was nine weeks very ill in England, both of Giddyness and Deafness, which latter being an unconversable disorder I thought it better to come to a place of my own, than be troublesome to my friends or live in a lodging; and this hastened me over, and by a hard Journy I recovered both my Aylments." "Neither did I go to Court, except when I was sent for, and not always then. Besides my illness gave me too good an excuse the last two months." (59.)

"I should think according to what hath been formerly, that I may happen to overcome this present disorder." (59.)

"All that we have left now to comfort us, is to hear that you are in good health." (59.)

"To our great joy, you have told us, your deafness left you at the inn in Aldersgate Street." (59.)

"The recovery of your health." (60.)

"My head is never perfectly free from giddiness, and especially toward night. Yet my disorder is very moderate, and I have been without a fit of deafness this half year." (61.)

"I never was better in my life than this winter." "I have escaped both headaches and gout." (63.)

"As you have had several attacks of the giddiness you at present complain of, and that it has formerly left you, I will hope, that at this instant you are perfectly well." (63.)

"I am just recovered in some degree, of two cruel indispositions, of giddiness and deafness, after seven months. I have got my hearing; but the other evil hangs still about me, and I doubt will never quite leave me, until I leave it." (64.)

"I am extreme glad to hear you are got well again; and I do assure you, it was no point of ceremony made me forbear writing, but the downright fear of being troublesome. If you have got off your deafness, that is a happiness I doubt poor Lady Suffolk will never have." (65.)

"I am tolerably well, but have no security to continue so." (67.)

"Good stomach improves every day."

"I sincerely congratulate with you upon the recovery of our dear friend the Dean." (68.)

"I have been very ill these two months past with giddiness and deafness, which lasted me until about ten days ago, when I gradually recovered, but still am weak and indolent." "I am well enough to ride." (68.)

"I received yours of the 9th of March, with the state of your health, which was the more agreeable, as it contradicted the various reports we had of you." (69.)

"The Dean's better health." (69.)

"You had been ill, but were perfectly recovered." (69.)

"* * * now in perfect health." (69.)

"Though others tell me you are in pretty good health, and in good spirits, I find the contrary when you open your mind to me." (69.)

"I found by your last, that your hand and your head are both in so good a condition." (70.)

"I received a letter from you at Cirencester, full of life and spirits." (70.)

"I had the pleasure of hearing you were well and in good spirits." (70.)

"The Dean is in good health." (71.)

"His health is as good as can be expected, free from all the tortures of old age; and his deafness, lately returned, is all the bodily uneasiness he has to complain of." (72.)

"Mr. Stopford who told me that you had enjoyed a better state of health last year than you had done for some time past." (72.)

Despondency, Misanthropy, and the Dread of Insanity. When a severe and constantly recurring disease of mysterious origin and nature afflicts a patient; when the disease is not one *per se* that shortens

life; when insanity does not, or need not, result; when the disease which tortures both body and mind is easily curable—then the effect of the tragedy upon the onlooker passes from the highest pathos to the profoundest grief of sympathy and to the extremity of indignation. These were the conditions throughout Swift's life. The nature of his disease is now well-known, and we have thousands of living demonstrations that it was due to an easily removable cause, but the tradition and the habit of medical minds of that time, as Craik says, was that it was "due to structural malformation near the brain." Craik alludes of course, to the exploded myth of Ménière. But even Craik, a non-medical man, had the astuteness denied to the present day professional leaders, to suggest the doubt, even in the face of the no-knowledge, that it is not necessarily so. Vast numbers of patients afflicted with migraine, a disease peculiarly fitted to set up the brooding and fear, have in the past entertained the same secret horror of subtle fateful brain disease. Most of our biographic clinics illustrate it to-day. Millions of sufferers are needlessly tortured by "migraine," and of these a large proportion are torturing themselves with the concealed fear of insanity and coming death. As did Swift, these plainly gave way to unnecessary solicitude about their health. Swift's correspondents understood this, often alluded to it, and upbraided him for giving away. Swift even confesses that he used the fear of coming attacks to keep him from sociability, and that he made excuses of his nonexistent deafness, loss of memory, etc., to avoid meeting people, etc. Pessimism and misanthropy, when coupled with "frenzied physical exercise," even if one knew no other symptoms of a patient, would lead the alert oculist to a tentative diagnosis pretty certainly to be proved by further questioning. And if this further inquiring brought out the symptoms clumsily and loosely grouped under the terms, "Migraine," "Ménière's disease," "bilious attacks," "nervous headache," "nervous dyspepsia," "sick-headache," "neurasthenia," "nervous breakdown," "nervous prostration," "hysteria," etc. (unknown names for unknown diseases, of unknown nature and unknown therapeutics!)—then the fashionable medicine of the present time would,—well, would go on just as it has done since "Migraine" has existed and since Ménière taught. And yet, and yet, "Migraine" and Ménière's disease are more easily curable or preventable than ingrowing toenail.

But let us examine the patient:—

"I detest the world because I am growing wholly unfit for it." (57.)

"I have been long weary of the world, and shall for my small remainder of years be weary of life, having forever lost that conversation which could only make it tolerable." (about 58.)

"I continue very ill with my giddiness and deafness, of which I had two days intermission, but since worse, and I shall be perfectly content if God shall please to call me away at this time." (59.)

"But I grow so old that I despond, and think nothing worth my care except ease and indolence, and walking to keep my health." (59.)

"I hear you are melancholy because you have a bad head and deaf ears." (Mrs. Howard to S.) (59.)

"What have I to do in the world? I never was in such agonies." (about 59.)

"For life is a tragedy wherein we sit as spectators awhile, and then act our own part in it. Self-love, as it is the motive to all our actions, so it is the sole cause of our grief." (60.)

"I fear my present ill disposition both of health and mind has made me but a sorry comforter." (60.)

"* * * seldom in a tolerable humour by the frequent returns of dreads of Deafness." (61.)

"Whatever may be the correct medical theory of Swift's malady, the story of these last years stands out, in its main features, clearly enough. During 1738 and 1739, as we have seen the irritation greatly increased: in 1740, it rendered him scarcely capable of seeing strangers; and to his morbid gloom was now added either loss, or absolute confusion, of memory. It was during this year that the miserable wrangle about the correspondence, bred of Pope's vanity and deceit, was dragging on its course: and Swift was as unheeded and unheeding in the midst of the attacks upon him, as if he had been dead." (Craik.) (60, 61 and 62.)

"I live wholly within myself; most people have dropt me, and I have nothing to do, but fence against the evils of age and sickness as much as I can, by riding and walking." (62.)

"When I was of your age, I thought every day of death, but now every minute; and a continual giddy disorder more or less is a greater addition than that of my years." (65.)

"I want health and my affairs are enlarged: but I will break through the latter, if the other mends. I can use a course of medicines; lame and giddy." (65.)

"I could heartily wish your other complaints were as much without foundation, as that of having lost half your memory, and all your invention." (65) (Ford, letter to S.)

"* * * with so ill a memory and so bad a state of health." (65.)

"If my health and the bad situation of my private affairs will permit." (65.)

"You will observe in this letter many marks of an ill head and a low spirit." (65.)

"I have too many years upon me and have too much sickness." (65.)

"Dispirited enough by sickness and years." (65.)

"I do not think life is of much value, but health is worth everything, and nature acts right in making that method which prolongs life absolutely necessary to preserve health, which makes a short life and a merry a very foolish proverb. For my own part I labor daily for health as often and almost as many hours as ever man does for daily bread." (65.)

"I am as sick of the world as I am of age and disease, the last of which I am never wholly without." (66.)

"Am afraid of being surprised by my old disorder in my head, far from help, or at least conveniency; and I dare not so much as travel here without being near enough to come back in the evening to lie in my own bed." (67.)

"My death, which my bad state of health makes me expect every month." (67.)

"My state of health is not to boast of; my giddiness is more or less too constant; I sleep ill and have a poor appetite I can as easily write a poem in the Chinese language as my own." (67.)

"* * * daily increase of ill health and old age." (68.)

"Years and infirmities have sunk my spirits to nothing." (68.)

"* * * so ill a state of health, and lowness of spirits." (68.)

"My disorders with the help of years, make wine absolutely necessary to support me." (about 68.)

"Years and infirmities have quite broke me; I mean that odious continual disorder in my head. I neither read nor write nor remember nor converse. All I have left is to walk and ride." (69.) "I find such a weekly decay, that has made it impossible for me to ride above five or six miles at farthest, and I always return the same day heartily tired." (69.)

"My health is very much decayed, my deafness and giddiness are more frequent; spirits I have none left; my memory is almost gone." (69.)

"I have for almost three years past been only the shadow of my former self, with years and sickness." (69.)

"I have entirely lost my memory, uncapable of conversation by a cruel deafness, which has lasted almost a year, and I despair of any cure." (70.)

"I have been many months the shadow of the shadow, etc., of Dr. Swift. Age, giddiness, deafness, loss of memory, rage, and rancour against persons and proceedings—I have not recounted the twentieth part—*I nunc et versus tecum meditare canoros.*" (70.)

"I am already alarmed with your excuse of deafness and dizziness. Yielding to such a complaint always strengthens it; exerting against it generally lessens it. Do not immerge in the sole enjoyment of yourself." (71.) (Castledurrow to S.)

"The year which followed was one, not of gradual, but of rapid, decay. Disease had long been there: but old age was now opening the way for its fiercer inroads. The strong brain that had so long resisted the attack, was now too weak to maintain the struggle: memory was going: the tenacity of his clear logic had dwindled into the losse and broken peevishness of senility. The decline into absolute rüin was quick and striking." (72) (Craik).

"In August and September, 1739, his memory was still in such a condition that by the assistance of an intimate friend, who was acquainted with the current of his politics and conversation, so far as they regarded his own times, he could have entertained with pleasure any stranger whatever, but not without the help of such an assistant: for, in the rapidity of his discourse, his memory would frequently fail him: yet by turning to his friend and asking with a seeming carelessness, 'What was I going to say?' he would, upon the least hint, recollect his ideas." Transcript of letter from Deane Swift to Lord Orrery, amongst Lord Cork's MSS. (72.)

Five years before his death he wrote to his cousin: "I have been very miserable all night, and to-day extremely deaf and full of pain. I am so stupid and confounded that I cannot express the mortification I am under both in body and mind. All I can say is that I am not in torture; but I daily and hourly expect it. Pray let me know how your health is and your family. I hardly understand one word I write. I am sure my days will be very few; few and miserable they must be. If I do not blunder it is Saturday, July 26, 1740. If I

live till Monday I shall hope to see you, perhaps for the last time." (72.)

"Even she (Mrs. Whiteway) was forced to visit the Deanery by stealth in order to see that he was cared for. Unseen by him, she watched the Dean, as in his restless agony he paced the room ceaselessly walking, as she tells us, for ten hours a day. He would eat only when alone: and even after it had been left in his room for hours, his food was often taken away untouched." (74.)

"Another prayer was also overheard, when he cried in his agony "to be taken away from the evil to come." In January, 1742-41, his behaviour, we are told, "was grown perfectly intolerable." (74.)

"I eat my morsel alone like a king, and am constantly at home when I am not riding or walking, which I do often and always alone." (?)

"I had at least half a dozen returns of my giddiness and deafness, which lasted me about three weeks a-piece. When this disorder is on me I have neither spirits to write, or read, or think, or eat." (?.)

Johnson replied: "That does not make his book the worse. People are influenced more by what a man says, if his practice is suitable to it, because they are blockheads."

"My breakfast," he wrote, "is that of a sickly man, rice gruel; and I am wholly a stranger to tea and coffee."

"To all people of quality and especially of titles I am not within; or at least am deaf for a week or two after I am well."

"He allowed his friends to speak of that malady that filled him with such ghastly forbodings, in the tone of light comment, that suited their own passing ailments. Dark as his future was to himself, he did not show its full gloom to his friends." (Craik.)

"In later years cynicism, enduring sadness, and increasing disease wore away the sprightliness of aspect that belonged to him: and as the Dictator of St. Patrick's, he bore a look that is disagreeable in its overstrained haughtiness,—a look which in a lesser man one would have been inclined even to call one of insolence. In the Deanery at St. Patrick's, and at Howth Castle, there are portraits of Swift, taken long after this, when the Drapier bore dictatorial sway in Dublin: and in both of these we see the domineering sneer with which he accepted the incense of a nation whose applause he despised even while he courted it. The brightness, the keen eye of the ready combatant, the freedom of the humorist, all are gone; and we see instead, a man whose hopes are dead, to whom life has yielded chiefly the withered leaves of cynicism, and who, with a sort of studied carelessness, accepts the power that has fallen to his lot, in a sphere beyond whose narrow confines he had once borne sway. There is another picture, which appears in Lord Orrery's Remarks, which is clearly one of Swift in his later days, just before he entered on the dark valley that for him preceded death. In it we see the anguish, the loneliness, the despair of one who sounded depths in human nature that he feels would have been better unexplored, and who stands gazing as it were, into a future which is overcast by dread of coming ill. Another portrait is one taken from a cast after death, when that later placidity which, we are told, belonged to his appearance in the second infancy of old age, had passed away, and there remained only the distorted wreck that partial paralysis, preceding death, had left." (Craik.)

"There was indeed one other very real and very terrible excuse for Swift. Amongst all the stories of mental struggle of which our

literary annals are full, there is none which is so full of mysterious interest as that of Swift. Beyond all troubles of fierce temper, violent emotions and over-strained self-inspection, beyond all the ravages wrought upon a high-strung nature by years of dependence, poverty, and repression; beyond the loneliness that came from his scornful pride, Swift had another burden to bear. This was the forboding of mental darkness. Though insanity, even at the end, scarcely seemed to release him from the pains of self-consciousness, yet the dread of it hung over him ceaselessly through life. It was no process of gradual decay. Until it dealt its final and decisive blow, it neither clouded nor impaired the clearness of his intellect. But ever-recurring pain warned him that the inevitable and unconquering cause was there, and the struggle seemed only the more intense from the strength of the citadel that was at last to be overthrown. We shall have to return to this more than once when the symptoms become more marked: but this much it is well to lay down at the outset of Swift's life. To say what he had to say with absolute simplicity: to be clear as to his own position and his own aims: to be misled by no abstractions: these were main objects in Swift's life. But, for all that, it was a life darkened by a constant struggle, foreseeing defeat at last, and made melancholy by the physical inroads through which that defeat was finally accomplished."

"Of these mere physical causes it belongs rather to medical science than to literary biography to speak. Their outward symptoms were those two maladies which from the age of twenty to his death never for any long period left him. What they meant, how they arose, what tended to their aggravation, it is hard to say. Swift himself, was fond of recurring to the theory of some trifling occasion, such as an early surfeit of fruit or an accidental chill. On these, the first and last words have been spoken by Johnson. "The original of diseases," he says, "is commonly obscure; and almost every boy eats as much fruit as he can get, without any inconvenience." Swift no doubt felt in later years, some injury to his health both from fruit and from chills. But with no undue confidence we may assert that the real source of the disease lay more deep; and medical investigation, if it does not absolutely prove, is at least consonant with the belief that he suffered from structural malformation near the brain. Whatever its character might be, that malformation never till the end obscured the marvellous lucidity of his thought, but neither did it ever suffer him to forget the signs of disease that it produced. In Swift we have one whose clearness of intellectual vision never needs to ask for a lenient judgment, but whose moral depression calls from first to last for all the forbearance we can show." (Craik.)

"The same absence of sympathy with his fellow men explains the unconscious irreverance with which he often treats religion. Strict as was the discipline that Swift imposed upon himself, yet the greater part of the world of ordinary religious ideas was a region where there was no resting-place for him. Unquestionably Swift's was a nature, in the highest sense, religious: we feel that Swift, though he never attained to true poetic utterance, had a temperament, which in his own words, was "blasted with poetic fire." (Craik.)

"The question is sure to occur, what justification was there for all this gloom and misanthropy?" (Craik.)

"Johnson knew and shrank from, the bitterness that was bred in Swift as it was in himself, of hardship, of early poverty, of disappointed hopes, and of the ceaseless burden of ill-health."

As to Swift's "Insanity," his biographer is correct in denying anything of the kind, even in the last days, if a correct definition of the term is held in mind. It was indeed marvellous that he had not long previously become really insane:—

> Sir William Wilde in his Closing Years of Dean Swift gave the first careful analysis of Swift's symptoms: and successfully proved that the term insanity had been far too sweepingly applied to Swift. He showed that the Dean suffered throughout life from brain pressure, aggravated by gastric attacks: and that congestion, to which he says the name of *epileptic vertigo* might be applied, was ultimately accompanied by paralysis, under which the brain sank into lethargy rather than insanity.

Sir William's "brain-pressure," "gastric attacks," "congestion," and "epileptic vertigo," would need but a passing smile, if "the most recent and most careful medical analysis" did not still keep on to-day to mumble the same inept, ludicrous, and meaningless words. And yet the biographer feels compelled to add:—

> "His final insanity was of a peculiar kind. According to the most recent and careful medical analysis, it was no slowly developing disease of the brain itself, gradually deepening from partial into confirmed insanity. Until the actual injury came to the brain, Swift, however morbid in his mood, however bitter in his cynicism, and however unmeasured his anger, was as far from insanity as could be conceived. Structural malformation was there, affecting the nerves of the ear, and producing giddiness and deafness. (Craik.)

Pseudoscientific impertinence! Most people are "insane," have dementia and "paralysis" during the death-rattle. In the "Unpublished Letters of Dean Swift," one reads: "Who can wonder that Sir Robert Walpole exclaimed, *Anything but History, for History must be false.* Possibly Walpole and Swift were thinking of the medical kind of history!

The Doctors of Swift's Time.* A glance at the puzzles and practices of the physicians of Swift's day is not without an illuminating suggestiveness,—left to the reader's mind without comment.*

---

*The doctors of no time are much concerned with the role that tobacco plays in the production of pharyngeal, aural, and nervous disease. Snuff-taking should be particularly injurious. Swift wrote:

"My head is pretty tolerable, but every day I feel some little disorders; I have left off snuff since Sunday, finding myself much worse after taking a great deal at the Secretary's, April 14. My head is still wrong, but I have had no normal fit only I totter a little. I have left off snuff altogether, I have a noble roll of tobacco for grating, very good." June 7. "Are you as vicious in snuff as ever? I believe, as you say, it does neither hurt nor good; but I have left it off and when anybody offers me their box I take about a tenth part of what I used to do, and then just smell to it, and privately fling the rest away: I keep to my tobacco still as you say, but even much less of that than formerly, only mornings and evenings and very seldom in the day." He never smoked but he used to snuff up cut and dry tobacco, which sometimes was just colored with Spanish snuff. He would not own that he took snuff." (43.)

"This doctor tells me that I must go into a course of steel though I have not the spleen." (44.)

"I must go and take a bitter draught to cure my head." (45.)

"I have done good lately to a patient and a friend in that complaint of vertigo, by cinnabar of antimony and castor, made up into boluses with confect of alkermes. I had no great opinion of the cinnabar; but trying it amongst other things, my friend found good of this prescription. I had tried the castor alone before, not with so much success. Small quantities of tinctura sacra, now and then will do you good." (51) (Arbuthnot to S.)

"But I thank God for some time past I am pretty well recovered and am able to hear my friends without danger of putting them into consumptions. My remedy was given me by my Tayler, who had been four years deaf and who cured himself as I have done by a Clove of Garlick steeped in Honey, and put into his Ear, for which I gave him half a crown after it had cost me 5 or 6 Pounds in Drugs and Doctors to no Purpose." (53.)

"I know how unhappy a vertigo makes anybody that has the misfortune to be troubled with it. I might have been deep in it myself, if I had had a mind, and I will propose a cure for you, that I will pawn my reputation upon. I have of late sent several patients in that case to the Spa, to drink there of the Geronstere water, which will not carry from the spot. It has succeeded marvellously with them all. There was indeed, one who relapsed a little last summer, because he would not take my advice, and return to his course, that had been too short the year before. But, because, the instances of eminent men are most conspicuous, Lord Whitworth, our plenipotentiary, had this disease, (which, by the way, is a little disqualifying for that employment;) he was so bad that he was often forced to catch hold of anything to keep from falling. I know that he was recovered by the use of that water to so great a degree, that he can ride, walk, or do anything, as formerly." (56) (Arbuthnot to S.)

"I wish the poison were in my stomach (which may be very probable, considering the many drugs I take)." (59.)

"His physician and friend, Dr. Arbuthnot assures me, he will soon be well. At present, he is very deaf, and more uneasy than I hoped that complaint alone would have made him." (59) (Mr. Pope to Dr. Sheridan concerning S.)

"I have been this ten days inclined to my old disease of giddiness, a little tottering; our friend understands it, but I grow cautious, am something better; cyder and champaign and fruit have been the cause. But I am now very regular and I eat enough." (59.)

"I long to eat of your fruit, for I dare eat none here." (59.)

"I am extremely sorry that your disorder has returned; but as you have a medicine that has twice removed it, I hope by this time you have again found the good effects of it." (Mr. Gay to S.) (59.)

"I have mentioned the case as well as I know it to a physician, who is my friend; and I find his methods were the same, air and exercise, and at last ass's milk. I will tell you sincerely, that if I were younger, and in health, or in hopes of it, I would endeavor to divert my mind by all methods in order to pass my life in quiet; but I now want only three months of sixty, I am strongly visited with a disease, that will at last cut me off, if I should this time escape; if not, I have but a poor remainder, and that is below any wise man's valuing." (59.)

"I have passed six weeks in quest of health, and found it not: but I found the folly of solicitude about it in a hundred instances: the contrariety of opinions and practices, the inability of physicians, the blind obedience of some patients and as blind rebellion of others. I believe at a certain time of life men are either fools or physicians for themselves; and zealots or divines for themselves." (60) (Pope to S.)

"Mrs. Dingley says she cannot persuade Mrs. Brent to take a vomit. Is she not (do not tell her) an old fool? She has made me take many a one without mercy." (60.)

"That you are very much out of order; sometimes of your two old complaints, the vertigo, and deafness, which I am very sorry for." (Dr. Arbuthnot to S.) (60.)

"The passage in Mr. Pope's letter about your health does not alarm me: both of us have had the distemper these thirty years. I have found the steel, the warm gums, and the bark, all do good in it. Therefore, first take the vomit A; then every day, the quantity of nutmeg in the morning, of the electuary marked B, with five spoonfuls of the tincture marked D. Take the tincture but not the electuary in the afternoon. You may take one of the pills marked C, at any time when you are troubled with it; or thirty of the drops marked E, in any vehicle, even water. I had a servant of my own, that was cured merely with vomiting. There is another medicine not mentioned which you may try; the pulvis rad. valerianæ sylvestris, about a scruple of it twice a day." (62) (Dr. Arbuthnot to S.)

A.

R. pulv. rad. ipecacoanae, scruple 1.

B.

R. conserv. flavedin. aurant. absynth. Rom. ana drams vi rubigin. martis in pollin. redact. drams iij. syrup e succo kermes, q. s.

C.

R. as. foetid. drams ij. tinctur. castor. q. s. M. Fiant pilulae xxiv.

D.

R. cortic. peruviani elect. rubigin. martis ana dram i, digere tepide in vini alb. Gallic. lb. ij per 24 horas: postea fiat colatura.

E.

R. sp. cor. cerv. sp. lavendul. tinctur. castor. ana dram ij misce.*

"She has fancied herself in a consumption a great while: but though she has had the most dreadful cough I ever heard in all my life, all the doctors said it was not that; but none of them did say what it was. The doctor here, who is an extraordinary good one, (but lives fourteen miles long, long miles off) has lately been left ten thousand pounds, and now hates his business; but says it is a sharp humour that falls upon her nerves, sometimes on her stomach and bowels; and indeed, what he has given her has, to appearance, had much better effect than the millions of things she has been forced to take." (64) (From Lady Betty Germain to S.)

---

*As these receipts may possibly be useful to some person troubled with the Dean's complaint of giddiness, Dr. Arbuthnot's receipt of bitters for strengthening the stomach, is added.

Take of zedoary root one drachm; galangal and Roman wormwood, of each two drachms; orange peel, a drachm; lesser cardamom seeds, two scruples. Infuse all in a quart of boiling water, for six hours; strain it off, and add to it four ounces of greater compound wormwood water.....H.

"I am extremely concerned to hear of the ill state of your health. I was afraid of it, when I was so long without the pleasure of hearing from you. Those sort of disorders puzzle the physicians everywhere; and they are merciless dogs in purging or vomiting to no purpose, when they do not know what to do. I heartily wish you would try the Bath waters, which are allowed to be the best medicine for strengthening the stomach; and most distempers in the head proceed from thence. Vomits may clean a foul stomach but they are certainly the worst things than can be for a weak one." (65) (Ford to S.)

"Lane only pours down medicines for the sake of the apothecary, and though he reaps the benefit of them I receive none." (65) (Miss Kelly to S.)

"I know physicians who, if you take them out of their practice, are very good sort of men; but was there ever in the world a consultation of them, that tended to anything else than robbery and murder?" (Bathurst to S.) (65.)

"My breakfast is that of a sickly man, rice-gruel." (66.)

"I am sorry to hear your complaints still of giddiness. I must recommend to you a medicine, which is certainly a very innocent one, and they say does great good to that distemper, which is only wearing oil-cloth the breadth of your feet, and next to your skin. I have often found it to do me good for the headach." (67) (Lady Betty Germain to S.)

"Heartily thank you for your generous invitation, which, however, I dare not accept for fear of another attack; against which I must fence, by taking vomits and other medicines prescribed for me by some physicians who happen to be my friends." (67.)

"I am glad you have got the piles, because it is a mark of health, and a strong constitution." (68.)

"Prevented by my old disorder in my head; for which I have been forced to confine myself to the precepts of my physicians." (68.)

"As you are sensible your disorders are chiefly occasioned by a cold stomach, I believe there is not anything so likely in this world to cure that disorder as the Bath waters; which are daily found to be a sovereign remedy for disorders of that kind: I know, Sir, you have no opinion of drugs, and why will you not try so agreeable a medicine, prepared by Providence alone?" (68) (Mrs. Barbour to S.)

"My constitution must certainly be a pretty good one; for it has resisted the attacks of five eminent physicians for five months together, and I am not a jot the worse for any of them." (69) (Pultenay to S.)

"The epileptic tendency to which so many of the Dean's symptoms point, appears to have broken out fiercely at the last. For thirty-six hours, we are told, he lay in strong convulsive fits. But these passed away: and the final exhaustion came on." (77.)

From the report published in 1882 by Dr. Bucknill* on the subject of Swift's disorder, I quote:

"The maladies of giddiness and deafness from which he suffered had their common origin in a disease in the region of the ear, to which

*Bucknill's worthless article is a good example of the easy slipshod acceptance of a diagnosis by the modern "scientist," who without any labor in gathering facts or ability to digest them, slides over all difficulties with that skill which gives the false satisfaction to the author and to the careless reader the erroneous impression of knowledge and observation.

the name of *Labyrinthine vertigo* has been given. He was, however, well advanced in life before these disorders attacked him at the same time. In 1734, he said: "It is only of late years that they have begun to come together." "I got my giddiness," he said, "by eating a hundred golden pippins at a time." And of this Johnson remarks: "The original of diseases is commonly obscure. Almost every boy eats as much fruit as he can get without inconvenience." Thinking little, exercise, and wine were Swift's chief remedies. *Vive la bagatelle* was his favourite maxim. He was like Johnson in thinking weather and seasons of slight importance. "I never impute any illness or health I have to good or ill weather, but to want of exercise, or ill air, or something I have eaten, or hard study, or sitting up; and so I fence against those as well as I can: but who a deuce can help the weather?" (Hill, Unpublished Letters of S.)

"The fanaticism of our day, which accidental coincidences of vapours in the brain produce, is as old as the Sect of the Aeolists with their wind-bags, and as the frenzy of the priestess of the Delphic oracle. Compare Hudibras, Part II, Canto iii, v. 773, with the ninth section of the Tale." (Craik.)

"In such a spirit Arbuthnot waited for death, which released him in the following spring, his piety mingled to the end with much of his half-humorous half-philosophical apathy, which suggests to old Alderman Barber the saying of Garth, as applicable to Arbuthnot, "that he was glad to die, being weary of having his shoes pulled off and on." (Barber to Swift, April 22, 1735) (Craik).

The Eyes and their Abuse Caused All the Mischief. Owing to Swift's prejudice, at once ludicrous and tragical (how frequent in Medicine is the combination!) against spectacles, we have a most unusual mass of data showing that the eyes themselves suffered and caused the suffering. Generally in the worst kinds of systemic reflexes starting in the eyes there are few or no complaints or diseases of the eyes. This is according to a well-understood law. But in Swift's case, the most outrageous disregard of every rule of ocular hygiene, and the greatest abuse of the eyes, brought disease of the organs themselves. This, in "the vicious circle of disease," recreated and intensified the attacks and frequencies of cerebral, aural, gastric, and other reflexes so common in migraine.* The increased severity of these morbid effects, is, as always, noteworthy, by increased reading, writing, etc. As in so many cases, past and present, the immediate connection between near-work with the eyes and the recurrence and intensification of the attacks is strikingly suggestive.

---

*Swift also had many of the somewhat rarer but still frequent symptoms of migraine known by the old-time doctors but well forgotten by the new-time ones. For instance, he was often "plagued by perpetual colds and twenty aylments," by "cruel cold," "bad cold," etc. And he had that symptom daily complained of in patients with sickheadache,—"pain these two days exactly on top of the left shoulder," "constant pain in the shoulder," "not able to go to church or court for my shoulder." Illustrations of different reflexes could be added.

"His sight had long been failing. Twelve years earlier he had told how Vanessa:

"Imaginary charms can find
In eyes with reading almost blind." (42.)

"You must know I write on the dark side of my bed-chamber, and am forced to have a candle till I rise, for the bed stands between me and the window, and I keep the curtains shut this cold weather. So pray let me rise; and Patrick, here, take away the candle." (43.)

"His head confounded everything; often he could not scribble even his morning lines to MD, and, with his occasional giddiness, he found the late dining of the ministers a thing to be avoided. He walked, because of the walk, but he walked plaguy carefully, for fear of sliding against his will." (43.)

"He had, sitting in bed that morning, a fit of giddiness; but he hoped in God he should not have more of it. He attributed it to late sitting and writing on the previous night. He had taken brandy; he never now eats fruit or drinks ale; and he has better wine than they. The fit had troubled him sorely, he is at no pains to conceal, and next night, without going to the coffee-house, he came home at six, and writ not above forty lines ("some inventions of my own; and some hints"), and read not a bit, and all for fear little MD might be angry; and he took four pills which lay in his throat an hour; and he supposed he could swallow four affronts as easily. Next day, and day after, he had no giddiness." (43.)

"This involved close and constant work, and Swift paid for it the penalty of ill-health. Close and ill-ventilated lodgings, with the press of exciting business, brought back his old enemies, deafness and giddiness." (43.)

"I was lying ill of a cruel disorder, which still pursues me, although not with so much violence; and I hope your grace will pardon me, if you find my letter to be that of one who writes in pain." (44.)

"This letter 45 is very brief; so altered in the writing by illness as hardly to be recognizable for his; and is addressed in another hand." (44.)

"A very disordered head hindered me from writing early to your lordship." (45.)

"I have been about five weeks in this kingdom, but so extremely ill with the return of an old disorder in my head, that I was not able to write to your grace. I have been the greatest time at my country parish, riding every day for my health. I can tell your grace nothing from Dublin, having spent the days I was there between business and physic." (45.)

"Have been hindered from writing by the illness of my head and eyes, which still afflict me." (50.)

"Neither my Head nor Eyes will suffer me to write more." (50.)

In some pretty lines to Stella on her birthday, Swift said:—

"For nature always in the right
To your decay adapts my sight;
And wrinkles undistinguished pass,
For I'm ashamed to use a glass;
And till I see them with these eyes,
Whoever says you have them, lies."

On another birthday he wrote to her:—

"This day then let us not be told
That you are sick and I grown old;
Nor think on our approaching ills,
And talk of spectacles and pills." (About 50.)

"I think to go soon into the country for some weeks for my Health." (50.)

"This is as much as I can send you at present from a giddy aking head." (52.)

"I can do no work this terrible weather; which has put us all seventy times out of patience. I have been deaf nine days, and am now pretty well recovered again." (56.)

"You shall take care of your health, and go early to bed and not read late at night." (57.)

"I am again with a Fitt of Deafness. The Weather is so bad and continues so beyond any Example in memory, that I cannot have the Beneffit of riding and I am forced to walk perpetually in a great Coat to preserve me from Cold and wett." (57.)

"I read no prints." (57.)

"The Fault of my Eyes the Confusion of my Deafness and Giddyness of my Head have made me commit a great Blunder. I am just come from the Country where I was about three weeks in hopes to recover my health." (57.)

"My eyes will not suffer me to read small prints; nor anything by Candle-light, and if I grow blind, as well as deaf, I must needs become very grave, and wise, and insignificant." (57.)

"I cannot read at night, and I have no books to read in the day." (About 59) (Hill).

"I have so severe a defluxion of rheum on both my eyes, that I dare hardly stir abroad. You will be ready to say, physician, cure thyself; and that is what I am about. I took away, by cupping, fourteen ounces of blood; and such an operation, would, I believe, have done *you* [italics by the editor] more good than steel and bitters, waters and drops." (59) (Bolingbroke to S.)

"Ask all the friends I write to, and they will attest this mistake to be but a trifle in my way of writing, and could easily prove it if they had any of my letters to show. I make nothing of mistaking untoward for Howard; wellpull for Walpole; knights of a share for knights of a shire, monster for minister; in writing speaker I put *n* for *p;* and a hundred such blunders which cannot be helped, while I have a hundred oceans rolling in my ears, into which no sense has been poured this fortnight; and therefore, if I write nonsense, I can assure you it is genuine and not borrowed." (59.)

"I never was in such agonies as when I received your letter and had it in my pocket. I am able to hold up my sorry head no longer." (59.)

"I can hold up my head no longer." (59.)

"This is a long letter for an ill head." (59.)

"My head will not bear writing long." (59.)

"* * * where I used to read and———, there I got my deafness." (59.)

"He wrote down his feelings and the record of her character, beginning that night, and continuing from day to day, save when "his head aches, and he can write no more." (60.)

"The same vexatious ailment, when I could neither give myself the trouble to write or read." (60.)

"Finding it troublesome to read at night." (60.)

"This is all I can see after half blinding myself with reading yr Clerks copyes." (61.)

"I lived very easily in the country; Sir Arthur is a man of sense and a scholar, has a good voice, and my lady a better; she is perfectly well bred and desirous to improve her understanding, which is good, but cultivated too much like a fine lady. She was my pupil there, and severely chid when she read wrong; with that, and walking, and writing family verses of mirth by way of libels on my lady, my time passed very well, and in very great order; infinitely better than here, where I see no creature but my servants and my old Presbyterian housekeeper, denying myself to everybody till I shall recover my ears." (61.)

"Yet I cannot read at nights, and am therefore forced to scribble something, whereof nine things in ten are burned next morning." (63.)

"I am sorry that my writing should inconvenience your eyes, but I fear, it is rather my style than my ink, that is so hard to be read; however, if I do not forget myself, I will enlarge my hand to give you the less trouble." (64) (From a letter to Swift.)

"Perpetual pains in my head have hindered me from writing till this moment, so you see you are not the only person that way tormented. I dare believe there are as many bad heads in England as in Ireland; I am sure none worse than my own; that I am made for pain, and pain for me; for of late, we have been inseparable. It is a most disspiriting distemper. And bring on pain of mind, real or imaginery, it is all one." (65) (Duchess of Queensberry to S.)

"I am happy that what you write is printed in large letters otherwise between the weakness of my eyes, and the thickness of my hearing, I should lose the greatest pleasure that is left me." (66.)

"God be thanked, I have done with everything, and of every kind, that requires writing, except now and then a letter; or like a true old man, scribbling trifles only fit for children or schoolboys of the lowest class at best, which three or four of us read and laugh at to-day, and burn tomorrow. Yet, what is singular, I am never without some great work in view, enough to take up forty years of the most vigorous healthy man: although I am convinced that I shall never be able to finish three treatises, that have lain by me several years, and want nothing but correction." (66.)

"I shall lose my health by sitting still and my leg in a chair." (67.)

"I am truly sorry for any complaint you have, and it is in regard to the weakness of your eyes that I write (as well as print) in folio." (67) (Pope to S.)

"I could never be weary, except at the eyes, of writing to you." (68) (Pope to S.)

"I found my head so disordered by writing a little, that I was fearful of having gout in it." (68) (Mrs. Barber to S.)

"You must indulge me the liberty of making use of another hand; for whether it be owing to age, or writing formerly whole nights by candle-light, or to both those causes, my sight is so impaired, that I am not able, without much pain to scratch out a letter." (69.) (Lewis to S.)

"I can hardly write ten lines without twenty blunders, as you will see by the number of scratchings and blots before this letter is done." (69.)

"The use I have formerly made of my eyes in writing by candle-light, have now reduced me almost to blindness, and I see nothing less than the pips of the cards, from which I have some relief in a long winter evening." (69) (Lewis to S.)

"This chancing to be a day that I can hold a pen, I will drag it as long as I am able." (69.)

"I am able to write no more." (69.)

"Books turn our brain; and work spoils our eyes." (70) (Mrs. Whiteway to Mr. Richardson.)

"You will pardon the Dean that he does not write to you himself on the occasion; for his head is very much out of order to-day." (71) (Mrs. Whiteway to Mr. Richardson.)

"The Dean is better both in health and hearing than I have known him these twelve months; but so indolent in writing, that he will scarce put his name to a receipt for money." (71) (Mrs. Whiteway to Mrs. Richardson.)

"Violent inflammation, which at first extended over his body, and finally settled into a painful abscess in the eye. For weeks, his agony was so great that it sometimes required the strength of five men to prevent this enfeebled old man of seventy-three from tearing his eye-ball from his head. At length the torture did its work. The swelling in the eyeball sank, and the pain ceased. The last struggle of the long combat was over: and the strong man, so long invincible even in decay, sank into apathy and silence forever. In this state he spent three years of living death. There was no longer any frenzied resistence to the mental decay;" (73).

"His appetite is good." "Mortification in his eyelid." (75) (From Orrery to Deane Swift.)

The further solution of the riddle is found in this paragraph:—

"He would not let art remedy the failings of nature; for, having by some ridiculous resolution or mad vow, determined never to wear spectacles, he could make little use of books in his latter years." ("Hill's Unpublished Letters of Dean Swift.")

And for over one hundred years after Swift died, none, lay or professional, observed that the morbid action of the eyes, the most important of the senses or organs of the body, had any morbid effects beyond themselves. However often proved and demonstrated in the added sixty-three years since the one hundred have passed, the "great" and "leading" oculists and clinicians of the world still deny the effects, and whistle millions of patients through their offices with these direct and glaring results unnoticed and uncured. If Swift were their present-day patient, there would be no inquiry as to the eyes. I know more than one great physician who has crippled and morbidized his own life, and the lives of innumerable patients, by the same prejudice against spectacles which caused most of the disease of Swift. Thousands of patients inherit the same silliness and evade the oculist; other thousands do not obey him and reap their reward; more thousands seek the refracting optician and find their inevitable fate; a still greater number flock to the fashionable and "leading ophthalmic surgeons and pro-

fessors, and their endings are yet more pitiful. Soon or late all come under the care of the cunning neurologists, the rest-cure men, the hysteria doctors, the operators, the private and public sanitariums, the asylums, and finally into premature and desired graves. They might have avoided it all, if they had been well advised and expertly treated by the few men who could have cured or prevented the needless misery. Even Swift, impossible as it was two hundred years ago to secure correction of all his ametropia, might have found at least half-relief. Nearly all could find it now, but not one in a hundred do find it. There are a dozen or two oculists in the civilized world who are relieving several thousand patients a year of Swift's disease, Ménière's disease, and of the diseases of the neurologists and gastrologists, but there are thousands of oculists passing hundreds of thousands of patients through their offices without touching the sources of their migrainous, nervous, and nutritional disorders,—blind leaders, verily of the blind! The few oculists who do know and who do cure, must bear the obloquy and scorn of famelessness and poverty thrust upon them by the many who cry, "Exaggeration!" and "the concensus of Medical Opinion!" Holy Science defend us and our sacred Private Practices!

MEDICAL AND SURGICAL PROGRESS.

RECENT DEVELOPMENTS IN THE THERAPY OF CARCINOMA.

By Wm. Engelbach, M. D.

The organized campaign against malignant disease, carcinoma,—a problem which has taken possession of the medical world during the last few years—has recently been the subject of earnest deliberation at the Berlin Medical Society. The following abstract is taken from the Berlin letter of Professor Boginsky (*Folia Ther.,* October, 1908) on a series of these papers not yet published, presented before this Society. Although the work of these different authors is somewhat conflicting, there is no doubt that a certain advance is recognized in the understanding of the complicated biologic conditions inseparably bound up with the question of cancer, which inspires the hope that the methods adopted will have a favorable issue. The discovery of an internal treatment of carcinoma which would be an improvement upon the present incompetent surgical methods, or a method by which surgical treatment could be enhanced by some internal physiologic and biologic influence on the peculiar forces of the organism, has been the aim of investigators in this field.

Dr. Anton Sticker, Chief Assistant in the surgical clinic of Professor Bier, made an important contribution on the effects of atoxyl and foreign albumins on malignant tumors. He gave three methods for the attack of malignant growths.

First, the one now most in use, the destruction by external means. This is the least efficacious because, while not protecting against recurrence, it destroys normal tissue and imposes on the organism the too arduous task of removing destroyed masses. The author calls this the non-specific or cytoid method.

Second, the internal method which he names the specific. This has for its object two purposes: (a) The production of an internal element, as cytolysin, preparing the diseased cells for solution; and (b) a ferment by which a rapid disintegration of the cells prepared by the cytolysin, is produced. Neither of these methods is practical in the treatment of carcinoma; the former because it has proved itself feasible for bacterial processes only; the latter because it is accompanied with such severe toxic effects that the organism succumbs to the superadded poison sooner than to the disease itself.

Third, the method based on the fact, discovered by Blumenthal and Bengell, that the constitution of cancer cells differs from that of somatic cells in that the former are more resistant than the normal cells of the body to peptic ferments and less resistant to trypsin. Other differences have also been shown to exist between somatic and tumor cells, *viz.,* in the amount of autolytic ferment contained and their biochemical constitution. The lytic ferments of tumor cells especially are capable of acting

heterolytically, so that if it is possible to exclude the latter factor by injury to the cells, the autolytic ferment may be enabled to bring about the destruction of the essential constituents of the tumor.

On these grounds the author founded the treatment of new growths with atoxyl (active autoferment) and albumins (heteroferment). Cancerous dogs were experimented on with atoxyl, which proved to be so highly poisonous to them that even with such small doses as 4 grains to 7½ grains, practically all the dogs died with the symptoms of arsenical poisoning. This rendered it necessary to use smaller doses. These produced a slowing of the growth of the tumor, and opposite effects as compared with larger doses, which tended rather to accelerate instead of retarding the growth. Analogous experiments on man have not led to a favorable positive result, as it was not possible to have patients under the influence of atoxyl until all cells of the tumor had disappeared. It was quite otherwise when atoxyl was used in combination with a foreign albumin,—one obtained from the body of another animal. The author gave only one such foreign albumin, although there are many substances which, introduced into the blood as ferments, cause the formation of antibodies, *e. g.*, rennet, antirennet, etc. The method of forming antibodies artificially by means of foreign blood, which are hostile to heterogeneous germinal cells, was originally used by Bier. The author was gradually led to observe that similar blood had the same effect, and to use it to the same end. In performing his experiments, the blood of sheep, cattle, pigs, rabbits, cats, guinea-pigs, and man was used. Sheep's blood proved to be the most efficacious in dogs affected with carcinoma. Soon after the injection of blood it was observed in dogs that there was a lessening in the size of the tumors, particularly in superficial proliferating cauliflower-like growths. The tumor became paler, whilst there was well-marked hyperemia in the immediate neighborhood. This initial success did not continue long, and it was evident that the injections were not well borne; the symptoms of serum disease appeared, but in a more aggravated form than occurs after serum injections. When, however, blood injections were made in combination with atoxyl similarly administered, the bad symptoms were absent, whilst the more favorable effects increased. It appears that by the introduction of foreign blood between the tumor cells, the latter are caused to disappear when attacked by the small quantity of arsenic, which, by the decomposition of arsenious acid, is dissociated from the atoxyl in the organism. We here discern a process repeated which is not infrequently observed, namely, that of spontaneous cure of cancer by the forces peculiar to the organism.

This important discourse met with keen opposition in the discussion, but found a certain measure of support. The most important speaker was Uhlenhuth, chief of the experimental institute of the German Board of Health, who has done an enormous amount of experimental work. From actual experience thus gained he was unable to lend his support to the prospect held out. Injections of atoxyl alone appeared rather to increase than to decrease the growth of tumors in mice, and by such injections combined with blood from various animals, or with the albumin obtained from the lenses of the eyes of animals which, biologically, is the same in the whole animal kingdom, no better result was achieved. In the gynecologic clinic of Herr Bumm no better result was obtained by the injection of blood obtained direct from the placenta. On the other hand, Edel laid stress on the probability of greater success by following up this theory of treatment. Referring to the injections of

mouse blood into carcinomatous mice made by Bashford, in London, he had perceived in the growth of malignant tissue an inversion of the method or way in which embryonal tissue grows, *viz.*, that differentiated tissue reverts to its original condition whilst the growth of the embryo leads to the differentiation of undifferentiated cell material. The boundless proliferation of differentiating growth would indubitably lead to the implication of tissues, providing there was no power in the organism to hinder it, and this inhibiting power, he believes, must be found in the blood or in the juices of normal tissues. Hofbauer attempted the destruction of tumors by injecting subcutaneously in their neighborhood substances which have the power of promoting the activities of bodies operating as antiferments in the organism in the same way as lecithin does with the toxic element in cobra poison. The substances used were in their turn atoxyl, quinine, the serum of cattle, cholesterin, serum containing cholesterin, hydrocele fluid and animal charcoal. The single doses used were: Atoxyl, 0.3 gramme; quinine, 0.5 to 0.1 gramme; cattle serum, 20 to 30 c. cm.; cholesterin first dissolved in alcohol then precipitated with physiological salt solution, 0.3 to 0.5 grains. From his experiments up to date, Hofbauer is able to establish the fact that without exception the tumors decreased in size, and, indeed, almost entirely disappeared. He warns, however, against being too sanguine. These statements met with opposition, especially by Edmund Falk who very much doubted the antifermentative action of the material used by Hofbauer, as well as that of placental blood formerly used by him. It is worthy of note that in all these experiments antiferments were increased as in the case of the ferment trypsin. Trypsin injections have not up to the present proved a success.

EPILEPSY.

A REVIEW OF SOME RECENT LITERATURE.

By SIDNEY I. SCHWAB, M. D.

1. SOME FURTHER OBSERVATIONS BEARING ON THE SUPPOSED THROMBOTIC ORIGIN OF EPILEPTIC FITS.—Turner (*The Journal of Mental Science,* October, 1908).
2. ON THE MECHANISM OF GLIOSIS IN ACQUIRED EPILEPSY.—Southard (*Amer. Journal of Insanity,* April, 1908).
3. THE PATHOLOGY OF EPILEPSY.—Russell (Proc. Roy. Soc. of Med., London, December, 1907, Vol. 1, No. 2, pp. 72-111).
4. SUR LA FORME DITE CARDIO-VASCULAR DE L'EPILEPSIE.—Jacquin (*Ann. medico-psycholog., jan.-fevr.,* 1908, No. 1).
5. EPILEPSIE UND LINKSHANDIGKEIT.—Redlich (*Arch. f. Psychiatrie,* 1908, Bd. XLIV., Hft. 1, S. 59-83).
6. ON THE PRINCIPLES OF THE TREATMENT OF EPILEPSY.—McDougall (*The Journ. of Mental Science,* October, 1908).
7. SOME NOTES ON STATUS EPILEPTICUS AND ITS TREATMENT.—Banks (*Jour. of Mental Science,* January, 1908, pp. 94-105).

The literature dealing with epilepsy is always being added to by contributions which concern themselves with aspects of the disease which have been long the subject of investigation. It is interesting, from time to time, to note a new point of view or a novel conception of the old subjects under discussion. It is for this reason that a review of some of the recent literature on epilepsy might be of some interest.

Turner (1), whose pathology of epilepsy excited considerable attention a year or so ago when it was first published, has contributed "Some Further Observations Bearing on the Supposed Thrombotic Origin of Epileptic Fits." His contention was that epilepsy was a disease occurring in persons with defective structure of the nervous system, either congenital or involutional, in which there is an abnormal state of the blood, characterized by a special tendency to clot, and that the exciting cause of the fits is sudden stasis of the cortical blood-stream, the result of a blocking of cortical vessels by intravascular clots. Inasmuch as this theory postulates a special tendency to clotting in epileptics' blood, apart from those periods when they are under the influence of fits, an investigation was undertaken to determine this point. The evidence now shows that in certain cases, chiefly among those who have infrequent fits, the coagulation rate is only quickened during the time that they are about to have fits. The rest of the contention, according to Turner, still holds good.

As regards the structural defect of the nervous system, the evidence, both clinical and pathological, that epilepsy is associated with structural defect of the nervous system amounts almost to a demonstration. It is associated in a very large number of cases with actual imbecility or idiocy, and in perhaps a still larger number with various grades of weak mind not amounting to actual imbecility. It is not meant that the structural defect of the nervous system is also shown by mental weakness. In some of the cases which during life were normal mentally, autopsy showed evidences of immature or defective cerebral structure. He believes that one of the most striking forms of defective structure, and one

which admirably lends itself to demonstration, is met with in the character of Betz cells. In 65 to 70 per cent. of all epileptics there is present a form of cell, which there are very strong reasons for regarding as an immature form, and which is very similar to an early stage of reaction *à distance.*

In regard to the immediate exciting cause for the fits, he is still of the opinion that they are due to sudden stasis of the blood stream in the cortex caused by the impaction of thrombi in the smaller vessels. This contention is supported (1) by experimental evidence, (2) by histopathologic evidence, and (3) by clinico-pathologic evidence. He has attempted to prove this by experimental facts, which show that sudden stasis of the blood stream is capable of causing convulsions. There have been found intravascular clots, especially in the form of small spherical bodies, in over 80 per cent. of the brains of epileptics examined, which now amount to some fifty cases, a percentage which is much higher than in any other class of cases similarly searched.

The clinico-pathologic evidence which Turner is especially desirous of supporting, deals with experiences in the rate of coagulation in the blood of epileptics. His observations on the coagulation rate of the blood number many thousands, and include, in addition to many healthy patients and epileptics, those suffering from dementia præcox, from acute mania and from imbecility. His conclusions from this material are (1) that the average rate of coagulation in the severe epileptics is quicker than in any other class of cases so far examined; (2) that in epileptics who are subject to frequently occurring fits, the average rate of coagulation during the time they are having fits is quickened; (3) that before (up to 24 hours) and during fits there is a further quickening.

Occasionally, from 24 to 48 hours after a fit, there is, as it were, a rebound effect and coagulation is retarded. In certain epileptics who have single fits at long intervals, the average rate of coagulation is not quickened; it may indeed be retarded, but still in these cases there is before and during fits a relative quickening.

The most interesting feature of these investigations and the opinions derived from them is the possibility of their use in a therapeutic way. Turner, himself, observes that we may have in the administration of extracts from certain glands a means whereby we could permanently retard coagulation and so be in a position to test whether this did or did not affect the epileptic attacks.

One of the most original pieces of work on the mechanism of epilepsy is that by Southard (2) which is entitled "On the Mechanism of Gliosis in Acquired Epilepsy." This work of Southard's lays claim to originality in two directions: (1) in setting forth the properties of typical epileptogenic focus in the cerebral cortex, and (2) the nature of that change in cortical tissue which favors epileptic discharges. He lays emphasis upon certain mechanical characters of the central nervous tissue in disease. The resulting theory might, perhaps, be termed briefly a microphysical theory, in the sense that it seeks a logical basis in an epileptic discharge in certain alterations of pressure in the central tissues. The present study lays the emphasis no longer upon characteristics of nerve fibres or of nerve cells or perhaps of their adnexa. The essay would rather call attention to certain pericellular conditions, giving rise to intimate alterations of pressure. At the present time we can merely describe these conditions and leave their translation in terms of volume energy and of surface energy to the future.

This line of investigation seems to be a direct logical sequence of modern physiological work. Sherrington has emphasized the im-

portance of what happens at the confines of the neurones, the synapses. In five cases which form the histologic basis of this theory and as a result of the study of the pathologic changes, Southard makes a summary somewhat as follows:

"The theory of epilepsy expounded in the present paper is founded mainly upon structural considerations. The histologic data have been interpreted largely from a functional point of view. The theory lays claim to some originality in two directions; in setting forth, namely, the properties of a typical epileptogenic focus in the cerebral cortex, and the nature of that change in cortical tissue which favors epileptic discharges. The characteristic feature of a typical prime focus is described as the separation of a normal cell-group from its normal control by other cell-groups and the impact upon the receptive surfaces of these normal cells of a steady, intimate, abnormal pressure—both segregation and compression effects by neuroglia overgrowth. That feature of cortical tissue which favors the spread of epileptic discharges is described as due to a simplification of cell arrangements, arising in the destruction of controlling elements with maintenance of motor elements. In the production of both prime focus and the abnormal tissue which permits uncontrolled discharge, the neuroglia tissue plays a characteristic part—exerting an active continued pressure in the first instance, and readily permitting lateral discharges and the activation of great groups of motor cells in the second instance. In the former case we see a fresh example of the irritative property of heightened tension—only here exhibited quite in miniature. In the latter instance we are dealing with conditions of still greater theoretical interest, approximating, though with diverse outcome, the loss of insulation seen in foci of disseminated sclerosis. The findings suggest the widely different effects upon nervous tissues of active and of quiescent gliosis."

Whatever may be thought of this work of Southard's, its importance is readily admitted. A theory of epilepsy largely of a physical nature based upon histologic evidence immediately attracts attention. It is of interest to note that both Turner's theory and that of Southard's are largely the result of patient investigation into the histologic strucure of epileptic brains, and for that reason, if for no other, impresses one as holding out the hope of a more complete appreciation of the cause and the nature of the epileptic attack. Leaving aside the more theoretical considerations of epilepsy, there are a number of less ambitious papers which deal with separate phases of epilepsy in a clinical way.

Alfred E. Russell (3), in a paper entitled "Pathology of Epilepsy," believes that there is an inherited condition of the nervous system which easily determines the development of epileptic fits. Certain conditions such as severe hemorrhage, eclampsia, organic brain diseases, stimulation of the cortex, uremia and various poisonings as lead and absinthe, are apt to be associated with fits indistinguishable from those of idiopathic epilepsy. Evidences brought forth in this paper in support of the claim that the phenomena of idiopathic epilepsy are dependent upon a failure of cerebral circulation, sudden cardiac inhibition and cerebral vaso-motor spasm. Russell believes that the intravascular clotting suggested by John Turner as a progression underlying the disease is to be regarded a secondary rather than a primary change.

Anglade et Jacquin (4) discuss a form of epilepsy which has been called cardiac-vascular epilepsy; that is, the relation between arterio-

sclerosis and epilepsy. In this paper there is quoted two cases in which very marked sclerosis and lacunar changes were found in the brain, and marked ateriosclerosis in the blood vessels. In such instances the epilepsy can not be said to be dependent upon the cardio-vascular changes, but secondary to them.

Redlich (5) discusses in a very interesting way the relation of epilepsy to left-handedness. He found that in epileptics about 40 per cent. shows a slight paresis of the right side. In 125 cases of epilepsy 17.5 per cent. showed left-handedness which is four times as much as is found among normal individuals. This certainly is a very interesting observation and brings up the question of whether evidences of hemiparesis are not much more frequently found in epileptics than was formerly thought to be the case. This finding would suggest further the fact that organic changes are very common in epileptic brains.

Among many papers on the treatment of epilepsy, a paper by McDougall (6) is especially timely. He brings out very clearly the advantages of colony treatment. If in spite of adequate treatment fits persist then the treatment must be modeled upon other lines entirely. The chief problem in these cases is how to diminish, not the frequency, but the importance of the fits. He further says that we must treat not the fits but the man who has the fits. Our object must be to enable him to lead as excellent a life as possible. As a ground work for this scheme use must be made of the two most important human cravings: the desire to be comfortable and the desire to be useful. Except in mild cases where the epileptic can keep a situation and do an ordinary day's work he should, whatever his income or social condition, live in a community of epileptics, for there alone can he be made to feel that he is both useful and comfortable. At a colony a patient finds that his attack is a matter-of-course and a matter of no importance. In his own home the epileptic feels that he is a peculiar person; at a colony he finds that he is a normal citizen. He comes to understand that he must do his share in the community, and there is work for him to do, work that he must recognize as useful work.

This paper of McDougall's, which was read at the annual meeting of the British Medico-Psychological Society, attracted considerable attention and aroused a great deal of discussion. It seemed to be the consensus of opinion that the colony treatment of epilepsy was perhaps the most ideal method, but one which, on account of difficulties, is scarcely to be practiced in any very large way. That the colony treatment would remove from the epileptic the social stigma which, perhaps, accounts for a great deal of the depression in epileptics, must be freely admitted.

Banks, (7) in a paper "On Some Notes of Status Epilepticus," relates his studies in 27 cases. He agrees with Pierce Clark that the sudden cessation of the routine treatment of epileptics may cause this condition. In most cases the patient had been having more than the average number of fits, some days previous to the attack of status, and after the attack appears to leave the patient more prone to them. The routine treatment is given as follows: Hyoscine-hydrobromide is made into a solution of 1-400 and four minims is therefore equal to 1-100 of a grain. At the onset of the status, four minims are given by hypodermic injection. After one-half hour, if there is no improvement, another four minims are given and the following morning an enema. This treatment seldom failed. Of thirteen cases in which the attack was treated in ways other than with hyoscine, ten died from the attack and three recovered.

THE BACTERIOLOGY OF DIPHTHERIA.

By Carl Fisch, M. D.

Under this title a volume,* edited by Nuttall and Graham-Smith, has just appeared. It is the presentation of the whole material that has accumulated of the bacteriologic and pathologic nature of diphtheria. It is not only bacteriology, as such, that forms the contents, it is an encyclopedia of all that is to-day established on the nature of diphtheritic infection. The merely clinical sides of the problem, so satisfactorily dealt with in many publications on this feature of the subject, are mentioned only as a concomitant of the bacteriologic and pathologic conclusions. The volume is composed of original presentations of the whole of the investigations in diphtheria by a number of men that have made the study of its nature their special work. The original work of the writers is not alone discussed, but the whole of the work that has been done in bacteriologic and pathologic investigation on diphtheria receives careful attention. The admirable feature of the book is the absolutely objective estimation of the results following this investigation and the work becomes at the same time a masterpiece of reference in one volume for all that has been published in the different lines of study on diphtheria. For scientific, practical and sanitary questions the book represents a complete review of the development of the growth of our knowledge on diphtheria, a review that makes easy of access—impossible in the widely scattered literature on the subject—all the information needed to study the various features of the problem. The widely scattered, important investigations are here united in a whole, complete up to the present time and presented with absolute objectivity. It does not give so much original addition to the knowledge we have, although the precise way of estimating the facts reported is immensely important as a stimulus to following special lines in solving unanswered questions and shows a complete familiarity with the previous work done on them. In the general textbooks on bacteriology, diphtheria cannot be considered as a subject that calls for more space and details than many other pathogenic infectious diseases. The desire of the authors to make this book the first of a series of books dealing in the same way with other infections must be highly praised. It is to be hoped that they will succeed in this way to make easily accessible the information so far obtained. The subject of diphtheria is dealt with in its different branches by men who are authorities through the work they have done, viewing not only their own work but the work of others objectively. This makes the book a standard, facilitating the future development of the solution of many questions as yet obscure. The single contributions are made by the following authors:

F. Loeffler, The History of Diphtheria.
Arthur Newholme, The Epidemiology of Diphtheria.
F. B. Mallory, The Pathology of Diphtheria.
G. S. Graham, The Diphtheria Bacillus.
G. S. Graham, The Pseudo-Diphtheria, or Hoffman's Bacillus.

*The Bacteriology of Diphtheria. By G. H. F. Nuttall and G. S. Graham-Smith, G. P. Putnam Sons.

G. S. Graham, Relation of the Diphtheria Bacillus to Hoffman's Bacillus.
G. S. Graham, Experimental and Natural Diphtheria in Animals.
G. S. Graham, The Modes of Infection in Man.
G. S. Graham, Bacteriologic Diagnosis.
G. S. Graham, Diphtheria-like Diseases.
G. S. Graham, Preventive Measures.
G. S. Graham, Postscarlatinal Diphtheria.
G. S. Graham, Diphtheroid Organisms in the Insane.
G. Dean, Types of Immunity.
G. Dean, The Toxin of the Diphtheria Bacillus.
G. Dean, The Formation of Antitoxin in the Body.
G. Dean, The Effects of Antitoxin on Toxin.
William Park and Ch. F. Baldwin, Mortality.
William Park and Ch. F. Baldwin, Serum Sickness.

The names of the authors and the subjects dealt with show a priori the superiority of the contents of this work above anything yet published on the subject of diphtheria. Prominent throughout the discussion is the absolute impartiality with which the character of problems of doubtful nature is considered without bias by opposing opinions. Loeffler's historical discussion of diphtheria is fascinating by the interesting data it gives but above all by the wide view of one of the discoverers of the etiologic factor of diphtheria on the gradual development and causation of our present knowledge. As such it is a very fit introduction for the material that follows. The epidemiology of the disease is splendidly discussed by Newholme on the basis of statistics and other material that has never been available for general conclusions. One of the most interesting contributions is that of Mallory on the pathology. Concise and clear, it will increase our means of understanding many obscure features of the pathologic changes observed. Most of the work in this book is original and in harmony with Councilman's former studies. It is the first time that attention has been directed to the importance and wide reaching influence of the study of the disease. Graham's treatises comprise in every detail, down to methods and experimental study, the character of the diphtheria bacillus itself. In these treatises material has been accumulated which represents practically everything that ever has been done on the subject. Especially valuable is the part dealing with the pseudo-diphtheria bacillus, lately the object of many investigations and discussions that have even led to certain alterations in the practical method of dealing with diphtheria. Well worth reading also are the remarks on the bacteriologic diagnosis that, in contrast to the prevailing rules, Graham bases on practical rather than on theoretical methods. The consideration of the diphtheria-like diseases and their differentiation is also a subject that has not received such an extensive discussion. Graham's contributions will always remain a source of information on everything pertaining to the diphtheria bacillus. New original contributions are made in many instances by the author himself and published here for the first time. Very extensive and complete is the paper by Dean on all the features connected wtih the toxic nature of diphtheria. The general consideration of the types of immunity offers nothing new; it is more or less schematic and would have been more impressive had the author not limited it so much to diphtheria, but extended his discussion in connection with the diversity of immunity in other infections and in animals that could lead to valuable

indications of the nature of immunity. The discussions of the diphtheria toxin and that of antitoxin are excellent, as was to be expected from a man at the head of one of the greatest laboratories in the world. Many points arising from the extensive serum work done at this laboratory have added valuable methods to this work, based not only on experience but on experiment. The difference in conception between workers in England and Germany in this respect are marked, but are only a difference of expression not of thought. This is more apparent in the chapter "On the Effects of Antitoxin on Toxin." While such a title is, perhaps, as far as practical purposes are concerned, permissible it does not express the real relation between the two substances,—not an action of antitoxin on the toxin but an interaction between the two, in which the two are equal in character. The effects of antitoxin on toxin can not be realized without the effect of the toxin on the antitoxin. The reactive quality of both is the same in producing the effect.

The discussion of the three theories on the nature of immunity processes is very clear and logical. While we have long known that Ehrlich's side chain conception was not the absolute or true interpretation of these processes, it is impossible even to-day,—with the knowledge that this interpretation must finally be changed,—to achieve this without the methods based on his theory that he himself calls only heuristic. The criticisms made by Dean of the physico-chemical theory of Arrhemius and Madsen are just but do not add more weight to the already existing negative evidence. That Bordet's theory of absorption has some prospect is not impossible, as with some degree of certainty we can assume the immune bodies to be of colloid character. Altogether Dean has given a clear and instructive picture of the modern status of the immunity problems and their biologic, physical or chemical interpretation.

Of immense practical interest are the papers written by Park and Bolduan. They are based on experiences that are obtained in scarcely any other place on earth and are made possible by an unique opportunity of doing work systematically in a city of millions, an opportunity created by the efforts of the two men themselves. The statistical data concerning the influence of various factors on the mortality from diphtheria are of the utmost interest and are important guides in dealing with the disease in other communities. The influence of climatic conditions, race, rainfall and occupation, are set forth, as well also as altitude and soil. The statistics showing the mortality in a long number of years are the index of the value of antitoxin treatment.

The subject of serum sickness is extensively dealt with. This chapter must have been written some time ago, as otherwise it would consider the problem more from the point of view of anaphylaxis. Of course, anaphylaxis is at present still in its childhood, but whatever the final solution of the problem may be the process itself is well established and allows of intricate experimental research. The weight of evidence is greater for the character of an amboceptor complement reaction than for that of the presence of a definite anaphylactin. The experiences of these authors justify them in being cautious of entering into theoretic speculations.

A bibliography so complete that no publication on diphtheria will be found absent, ends the book.

We must note that the editors hope that for other infectious diseases analogous collective works will be possible. If they shall fulfill their mission as satisfactorily as this first volume, our literature will be greatly enriched.

CORRESPONDENCE.

LONDON LETTER.

(FROM OUR OWN CORRESPONDENT.)

The winter session was inaugurated with the usual ceremonial introductory lecture at a few of the schools. This old standing custom is gradually dying out but it dies hard. Without in the least reflecting upon the excellent addresses given by eminent members of the profession, that given by a layman attracted the most notice. As the layman in question was Mr. Rudyard Kipling this is not surprising. He was, as usual, very outspoken, setting forth some plain truths in a way that no medical men would venture to do in the presence of a lay audience. He got in some vigorous blows on behalf of those engaged in experimental research, for which the whole profession owe him hearty thanks, as well as for his very sympathetic description of the work done by our profession. Kipling as a member of the medical profession would be intensely interesting and informing, for a time at any rate. His clinical reports would certainly be worth hearing. To a remarkable power of keen observation he unites the great gift of conveying a great deal in a very few words. His description of locomotor ataxia in his story "Love o' Women" is an instance of this, although, of course, the case differs in more than one important feature from those usually seen and described.

The President of the College of Physicians, Sir Douglas Powell, gave an address at the opening meeting of the Pupils' Physical Society at Guy's Hospital. Dr. Goodhart was the chairman for the evening, in the absence of Sir Samuel Wilks. Sir Douglas chose for his subject, "A Just Perspective in Medicine," and gave a most interesting and valuable address. The subject is a timely one, perhaps more so now than at any other period, when there are so many and various methods of diagnosis, such a bewildering number of remedies and an ever increasing out-put of more or less plausible theories. It is difficult at times to see the wood for the trees, and one is particularly grateful when some experienced and highly esteemed guide gives us the benefit of his advice, enabling us to travel along the proper path and avoid the pitfalls and other traps which beset us on either hand. As Sir Douglas pointed out, "the gift to see things in their due relationship with other things is possessed by but few people, and it is not a little curious to observe how in politics, religion, science, and even art, persons lose their sense of perspective as they become engrossed in the study of one special department or aspect of things." He suggested that it would be wise for every specialist in medicine or surgery to have an assessor, especially in view of the increasing number and profoundly increasing complexity in technique of the specialties in practice and research developed in recent years. He compared the undue importance attached to fever a few years back, and the consequent rush for antipyretics, with the practice now employed based upon a more rational estimation of the factors involved. Pyrexia is a normal reaction to toxic invasion, and a rise of temperature is a symptom

as proper to certain diseases as a normal temperature is to health. Sir Douglas insisted that both on economic grounds and on those of clinical convenience a workable clinical index must be found as a guide in the use of vaccines. He drew attention to the work done by Latham, Spitta and Inman upon the relation of the opsonic indices to temperature, discussing the value of the temperature curve as a guide in tuberculin treatment. High temperatures correspond with negative phases, while normal or, in some degree, sub-normal temperatures correspond to a re-active elevation of the index. Laboratory research may confidently be expected to furnish clinical indices for guidance at the bedside. As these results become part of general clinical knowledge and method so the relational perspective of medical practice will be enlarged and deepened.

Dr. Alexander Macalister, the Professor of Anatomy at Cambridge, gave a most interesting account of medical education, as it was fifty years ago when he attended his first introductory lecture, in his address at King's College. He gave a much needed warning on the necessity of acquiring the faculty of correct and critical observation, which is in danger nowadays of becoming atrophied from want of use. The student is spoon-fed by his teacher and has for use a large number of excellent and sumptuously-illustrated text-books. From these he can assimilate knowledge of a kind without exercising any independent power of observation.

When the teaching University of London is really born alive—for it is greatly to be feared that the latest conception has resulted in a miscarriage—among other invaluable institutions to form part of it will be the splendid museum at the Royal College of Surgeons. In the meantime, with a view of increasing the usefulness of this great collection, the council of the college has arranged for a series of demonstrations to be given in the theatre of the college during the present session by the conservator, Professor Keith, and the pathological curator, Professor Shattock. The course will be illustrated by specimens from the museum. Such a course will be of infinitely greater value to the ordinary man than working through the specimens by himself, an attempt which is, not unusually, unsuccessful owing to the *embarras de richesse*.

The Council of the College has decided to advance in spite of the recent voting. The examinations for both the Fellowship and the Membership are to be thrown open to women. It is, undoubtedly, a wise step to take.

John Burns, our hard-working Resident of the Local Government Board, has by a recent order announced by Dr. Newsholme made a good step forward in the fight with tuberculosis. All Poor-law medical officers are now to notify every case of tuberculosis in parish patients to the local medical officer of health within forty-eight hours after the establishment of the diagnosis, if the medical officer of health should desire it. The desire will depend a good deal upon the sort of sanitary authority there is in power locally. Bumbledom is none too anxious to have slum property strictly dealt with. Progressive councils will welcome the chance of being able to fix upon the foci of infection, or at any rate some of them and those certainly the worst. London has quite recovered from its cold fit of a year ago, and the next election, two years hence, will certainly see a progressive council once more in power in place of the penny-wise and pound-foolish reactionaries now muddling along.

November 20th.

PARIS LETTER.

(FROM OUR OWN CORRESPONDENT.)

It is no longer permitted us to refuse to dietetics the first place among the therapeutic methods at our disposal, since to ignore the importance of a rational alimentary regimen for the well as for the sick is to-day a matter for severe censure. But in proportion as one studies the subject, complexities arise due in part to the failure of chemistry to fulfill the hopes on which rested our expectations that it would be our only and absolute guide. From the reactions which take place in the organism we learn only the secondary effects and the combinations as they pertain to a duct; all our investigations fail to reproduce chemical changes in the living tissues. Therefore, the therapeutic deductions from our knowledge of biologic chemistry and, more particularly, of chemistry of the digestion and assimilation, are necessarily very imperfect. We cannot, in all cases, equalize these deductions or depend on the laboratory for a system by which the indications and the schedule of an alimentary regimen can be established. Hence we are forced to place our greatest dependence on calculations derived from the clinic.

If it would suffice, in the tuberculous, to compensate the losses of certain substances by the ingestion, in excess, of foods which would take the place of those that are absent, the problem would be easy of solution. But it is necessary above all things not to lose sight of those special conditions which moreover are very obscure for us at present, and which result from combinations and chemical reactions in a living organism. The clinical results in these special conditions should show us whether our theoretic conceptions have yielded the practical results that would conform with our preconceptions. But the principle on which rests the doctrine of over-alimentation of the tuberculous has not been without some disappointment for doctors, since it has been observed that over-alimentation has produced numerous diseases. Without doubt the end justifies the means, nevertheless one should condemn some bad results from over-alimentation though it may have in its favor a large number of cures. When a tuberculous person increases in weight we generally say that he is on the way to being cured, and that only when a cure is in sight the weight increases. But this has never been proved and as yet the fact has not been established that increase of weight might cause a cure. All doctors know that the obese tuberculous may present very advanced lesions and even cavities; while, on the other hand, a number of patients show ameliorations in their pulmonary lesions, though they remain relatively thin.

Very numerous, indeed, are the published facts of authors relative to divers disturbances resulting from over-alimentation in the tuberculous. Of first importance are the gastro-intestinal disturbances: gastroenteritis and hepatic congestion. Appendicitis is certainly aided by the abuse of alimentation; above all by the excess of a meat diet. Fever in certain cases is exacerbated by the same causes and yields only to a lacto-vegetarian regimen. Moreover, various dyspepsias, from hypersecretion or from atony, from gastric and intestinal fermentations, are a danger in over-alimentation, and it is not necessary to dwell on the dire consequences of these disturbances when they are somewhat prolonged. Nephritis without albuminuria is created, or at least aggravated, by the abuse of foods. To these disturbances which generally occur imme-

diately, it is necessary to add all those disturbances which follow a little later: lithiasis, gout, obesity, diabetes, cutaneous eruptions following auto-intoxication, and aggravation of congestive or spasmodic affections of the respiratory tracts. Clinically, excessive alimentation is shown by the facial expression, which is animated or congested; by the odor of the breath; by the condition of the tongue indicative of retarded digestion; by epigastric distention; and by the tendency to sleep. The examination of the urine shows that it is dark in color, ammoniacal, that it contains reddish brown pigments, and that it sometimes reacts to Fehling's solution or may be albuminous. Finally, the extremes of thermic elevation are sometimes directly dependent on over-alimentation, in so far as it adds an excess of alimentary toxins to the toxins of a bacillary origin.

What ought we to conclude from these facts, save that the prescription of the dietetic and alimentary sort should be, as regards the tuberculous, the object of constant solicitude on the part of the physician. It is just as important, not to say of more importance, to prescribe an alimentation for the sick as the medicines which to-day receive the greatest attention. The alimentary prescriptions should take less note of the quantity of the substances ingested than of their nature and their quality. Hence it is of importance not to lay too much stress simply on over-alimentation, but to prescribe food in a substantial fashion and as the exigencies of the diseased organism demand. In other words, the question of alimentation of the tuberculous should be individually considered in each case. If the patient has normal weight and is not thin, it is not necessary to attempt to fatten him, no matter what may occur later. Cases are very rare where true over-alimentation ought to be prescribed. There are those in which the tuberculous toxins produce a rapid disintegration of tissues; hence, where the patient has azoturia, it is necessary to institute the supplementary ingestion of azotic substances.

The alimentation of the tuberculous should be prescribed and watched as if it were a medicament. Only in daily studying the physical condition of the sick, as it depends on the ingestion of meat, fats, and sugar, is it possible for the physician to institute a regimen, a little more substantial than the one prescribed for the healthy subject. Without doubt the regimen should be less abundant and more rational than the faulty over-alimentation which obtains to-day.

OBITER DICTA FROM FOREIGN JOURNALS.

PSYCHIC EVOLUTION AT THE TIME OF PUBERTY.*

That the period of puberty should mean more to the medical mind than the physical development of the individual is a matter that many well-meaning physicians will regard in the light of the unnecessary, for in its train would be burdens which the already over-burdened medical practitioner is not keen upon assuming. But though there may be an indifferent note in his attitude to so vital a subject, the truth as we see it to-day in all its modern dress compels us not to relegate any longer to matters of secondary importance the study of a phase in human development that already has taken hold of the most advanced minds in general literature. Franz Wedekind's drama, "Frühlingserwachen" (Spring's Awakening), so popular in Germany to-day, is a case in point, and though we as medical men do not generally approve of the drama making inroads into psychology or pathology for its material, we cannot but admit that occasionally an awakening to the necessity of what should engage the attention of the medical mind emanates from certain tendencies in the evolutionary processes of literature. That Dr. René Cruchet is not averse to devoting a searching mind to the subject of the psychic phases of puberty evidences a desire on the part of a medical man to engage seriously in its mazes, and makes us hopeful of further study from medical sources.

The mind, according to an oft-repeated quotation by Lamartine, has its puberty as well as the body, and it is not unusual, says Dr. René Cruchet, for the psychic modifications which occur at this epoch to be more important than those which at the same time are revealed by changes in the body. Since the value of these changes is of paramount importance, in a social sense, it is wrong, when considering this subject, to pay greater attention to physical development and its corporeal characteristics than to mental development. If puberty is a critical period for the body it is no less critical for the mind: therefore, there should be an undivided interest in the study of the repercussions of that awkward age not only on the physique but on the morals so as to combat them in both instances with equal energy. As with the physical growth, one may study the psychical in the three successive periods, that is to say, in the pre-puberty, the properly called puberty, and the post-puberty periods.

The pre-puberty period. After succeeding the phase which is almost exclusively mnemonic and imitative and which is characteristic of the earlier and the later stages of infancy, there follows with the advent of puberty a much more reasonable phase. The mind supplied with all sorts of information which have become fixed by the memory similar to the mechanism of a simple register, evinces a tendency to utilize its storehouse of knowledge for itself by forming concrete ideas, and particularly abstract ones, and by comparing and generalizing. Reason and judgment, up to this time impersonal and often incoherent, become more

*Extract from a chapter in the first fasciculus of "La pratique des maladies des enfants," which was published in November, by J. B. Bailliere et fils, of Paris.

personal, more just, more secure. Attention is more sustained, reflection more constant, imagination more restrained, the affections more tender, the sentiments less reflex and impulsive, are better curbed, better mastered by a volition which commences to lose perception of itself; the tastes and individual predilections develop; the sexual instinct, until now hardly suspected, commences to effloresce. These divers psychical manifestations tend towards a stable equilibrium: discipline is evidenced, conduct is excellent, work and application are better than formerly. It is the moment in which instructors view with gratification the decided change from boyhood to manhood in their pupils and parents regard with joy the fortunate modifications in the character of their children. One may say of this phase in the development of the child that it bears some resemblance to an analogous change in the physique, but it is different in so far as it seems to gather strength so as to resist attacks at undermining and breaking up the first attempt towards a harmonious equilibrium.

Period of real puberty. In this phase of development we see the psychical crises of puberty which coincide almost exactly with the physical crises of the same period. The psychical modifications which now become manifest are extremely important as a matter of observation and should not be ignored by physicians. They should be studied separately in the young man and in the young woman. In the latter at the same time that the body undergoes the radical change by which the physique of the child becomes that of the woman, the psychical state is transformed, assuming all the characteristics inherent in her sex. Grace and elegance become apparent; the contours of the figure are influenced by them; the art of pleasing is developed and despite her reserved manners, she is most seductive. But puberty emphasizes above all, the good and bad qualities, preferably the bad. If as a young girl she was timid, as a young woman her timidity will be exaggerated with tendencies to pusillanimity and bashfulness, to solitude and isolation; if on the other hand, she was lively and sprightly, her exuberance will degenerate into a veritable agitation, an incessant loquacity. In case there were pride and arrogance and a desire to torment others, we will see superciliousness and humiliation; or if humble and good, there will appear self-effacement and an inability to act, with a tendency to useless sacrifices. Again, if the girl was kind and always disposed to be accommodating, she will develop coquetry to excess, displaying even at times considerable bad taste. Indolence tends toward laziness, unfeelingness toward wickedness, deceit toward falsehood, boasting toward effrontery, thirst for knowledge toward unquenchable ambition. Character becomes irritable, the humor changeable, capricious, fantastic, passing from excessive joy to profuse torrents of tears. Some are sulky, and sly, others violent and enraged. How to approach these souls in revolt is indeed a difficult problem. According to Marro, young girls are most difficult to control between the ages of fourteen and sixteen,—"they would try the patience of a saint." His inquiries made in many institutions show that lack of application and waste of time coincide with the appearance of the menses and the bodily development; it is the time of bad conduct at school, and faults less grave than with boys —laziness, negligence and uncleanliness—manifest themselves.

Those tendencies of the sex which emphasize sentimentality are the ones which at puberty disturb the equilibrium of the mental state and the material aspect of things is constantly derided while the sentimental view is exalted. This sentimental exaltation has been very well described by

Gustave Flaubert, the French novelist, in his characterization of Emma Bovary when she was between thirteen and fifteen. The religious idea arising from long retreats before making the first communion is the one that takes strongest hold on the imagination of Flaubert's heroine because, as the author says, "she was gently assuaged by the mystic languor which exhaled from the perfumes coming from the altar, the coolness of the holy water, and the radiance of the candles." What follows in the book has the same truth: "Instead of following the mass, she fastened her gaze on her books in which were pious vignettes surrounded by azure; on the sacred heart pierced by pointed arrows; on the tortured Jesus stumbling under the weight of the cross. She essayed mortification by fasting for a whole day. She racked her brains in an attempt to find out what unusual vow she could make. When she went to confession, she invented petty sins so as to remain in the confessional box as long as possible, feeling exaltation from remaining on her knees, with her hands interlocked, and her face pressed against the grille eagerly listening to the whisperings of the priest. The references to the betrothed, the husband, the celestial lover and marriage eternal, which recurred in the sermons, filled her soul with delicious and unhoped-for thoughts." After the religious exaltation the heroine experienced an exaltation provoked by music: "During her music lessons and while she sang she was engrossed with ecstatic views of angels with golden wings, madonnas, lagoons, gondoliers, and though the songs were compositions that were distinguished by nonsense and very little musical art, she nevertheless felt that she was in the presence of a phantasmagoria of sentimental realities." Again, history is the pretext for a similar mental condition: "When reading Scott's novels she became enamored of historic things, dreamed of fencing, tournaments and minstrels. She had the desire to live in some old manor as did the chatelaines who, under the trefoil of a pointed arch, leaned gracefully over a stone parapet in anticipation of some cavalier with gorgeous white plume who would gallop up the road on a jet black charger. She became enamored of Mary Stuart, and her veneration of all illustrious and unfortunate women was intense. Joan of Arc, Héloïse, Agnes Sorel, the beautiful Ferronière and Clémence Isaure, appeared to her as splendid comets in the immense obscurity of history." Geography appealed to her on account of its exotic descriptions: "When she heard for the first time selections from Chateaubriand's 'Genius of Christianity' and realized the meaning of a sonorous lamentation of romantic melancholy, she thought it was repeated in all the echoes heard on earth and in eternity." And when in the dormitory, by means of the meagre light of an Argand lamp she examined the pictures in her geography, she dwelt on those which depicted "sultans with long pipes, bayaderes, giaours, Turkish sabres, Greek headgear, and above all indistinct landscapes of dithyrambic countries which would show her at one and the same time palms, fir-trees, tigers on the right and lions to the left. Tartar minarets extending to the skies, Roman ruins and squatting camels,—all framed in a virginal forest with the sun-rays falling perpendicularly on a sheet of water on which idly float a number of beautiful swans. * * * * *" At this epoch she read surreptitiously "Daphnis and Chloe" and "Paul and Virginia." "She had read 'Paul and Virginia' and she dreamed of a cabin built of bamboo, of a slave, like Domingo, and a dog like Fidèle, but above all of a friendship with a little brother who plucks the most luscious fruit for her in arbors higher than a church steeple, and even wanders in his bare feet miles over the sand to bring a bird's-

nest to her. Her mind was taken up with love, lovers, mistresses, persecuted ladies who swoon away in solitary pavilions, postillions that are killed when making relays, horses that are lashed until they fall, somber forests, heartaches, oaths, sobs, tears, and kisses, casements with moonlight streaming through them, nightingales in far off boscages, men brave as lions, docile as lambs, virtuous as no one has ever been, always prosperous and fit, always lamenting."

This pen picture of a strang sentimentalism, though somewhat exaggerated, corresponds at least in part to the mental state of the young girl passing through a pubescent crisis. Unfortunately most of us ignore the psychical manifestations, or at least regard them with a considerable degree of scepticism or indifference. Educators and doctors should not overlook this important matter for it devolves on them, not only to watch and care for the growth of the body but to place under strict surveillance the psychical manifestations, so that some sort of curb can be placed on undesirable and exaggerated mental qualities.

HISTORICAL NOTES.

JEAN-PAUL MARAT, THE PHYSICIAN.

The world has had its surfeit of Marat, the demagogue, the man who edited *The Friend of the People,* the man of all bloodthirsty men in the French Revolution, who was always shouting for 100,000, 200,000 heads, and whose hatred of rank and order and the peaceful life so graciously introduced into France by Louis the Great and Louis the Well-Be-

JEAN-PAUL MARAT.

loved, has never been equaled in the world's history! In the words of a historian of the times: "To mention so monstrous a name as Marat's is a declaration of one's sympathy with the impersonation of horror and deviltry, for hast not history covered the name with mire and blood?" Now though all this may be true and is not much in favor of Marat, the demagogue, there was nevertheless another side to his character, a phase which had its supreme manifestation during his sojourn in London and later on in Edinburgh, at a time when not only the practice of medicine engrossed his attention, but when scientific studies of quite an exceptional nature were recorded to his credit. The conflicting re-

ports which have come to us from various French historians, whose chief virtue seems to be a deplorable party spirit, makes Marat out to be a charlatan. Michelet, for instance, in his "History of the French Revolution," chap. IX., Vol. II., says: "It is reported that at times Marat was in such reduced circumstances that he was compelled to sell medicines in the public places of Paris. Marat claimed to be a doctor; I regret that I am not able to verify his claim." Two pages further on in the same book, the author forgetful of what he had written, says, "Marat joined the household of the Comte d'Artois, first in the humble capacity of physician to the stables, but later on by brevet to the exalted position of physician to his guards." And thus the historian, Montjoie, author of the "History of the Conspiracy of Philippe Egalité:" "Marat always sold herbs to the lower classes, they being credulous and most eager for the remedies, because he assured them that his preparations were simples which came from his own province and had been metamorphosed by him into a universal remedy. With the wealthy he posed as the inventor of a specific water which would cure all diseases. He sold of this miraculous water thousands of small bottles, the fixed price being two louis per bottle. It is not an exaggeration to state that a water invented by a scamp as bad and ignorant as Marat could be nothing else than poison."

Despite these rather derogatory statements, reflecting on Marat's status as a reputable physician, the facts which greet us to-day after the obscurities incident to political hatred and rivalry have been swept away, are decidedly in his favor. For we read in all the unbiased books bearing on his life that both in London and Edinburgh he enjoyed an enviable reputation as a medical practitioner. His "Essay on Man," his "Enquiry into the Nature, Cause, and Cure of a Singular Disease of the Eyes," with a dedication to the Royal Society, his "Memoir on Medical Electricity," speak well for his philosophy and science; and though the first provoked Voltaire on account of its attack on Helvetius into making the well-known satirical remark, "How does it happen that a doctor never makes mention of Hippocrates," we should not lay too much stress on such mordant wit to the detriment of Marat, the physician, but remember for the sake of the man's reputation as an eighteenth century ornament of the medical profession that his "Memoir on Medical Electricity" was crowned August 6, 1783, by the "Royal Academy of Sciences, Belle-Lettres and the Arts" of Rouen, and republished the following year, at Paris, by Sorry. The program the Academy announced was: "To what extent and in what diseases should magnetism and electricity be used?" In the meeting of August 6, the prize was handed to Marat with the following words: "Though the author has not offered anything new in regard to the vexed subject of magnetism, he fills all the conditions in regard to the questions pertaining to electricity as a therapeutic agent, for he mentions most precisely the diseases in which it should be applied to effect an amelioration of the symptoms, and the diseases in which its use would cause only harm." It is well to remember here that though Marat's enemies made him out to be a charlatan, he refrained from paying but the slightest attention to the subject that is most intimately associated with charlatanry—magnetism.

Recently we have read a deal about doctors and politics, and though our predilections are for doctors to take more than a passing interest in so vital a subject, we should not forget what political fervor did in Marat's case to blacken even his reputation as a physician. We hold no brief for Marat, the demagogue, but for Marat, the physician, the philosopher, the savant, we have nothing but praise.

BOOK REVIEWS.

STOEHR'S HISTOLOGY. Arranged Upon an Embryologic Basis.—By Frederick T. Lewis, M. D. From the 12th German Edition, 6th American Edition. 450 Illustrations. Philadelphia: P. Blakiston's Sons & Co.

Stoehr's book, which was, in the former American editions, more or less identical with the German publication, has been changed entirely in this sixth American edition. It is not Stoehr any more, but Lewis. Histology has been for a long time a purely descriptve branch of science, although the connection with the problems of the development of the structures has not been neglected. Only lately has the material in this direction so increased that the idea of a histology prepared on an embryologic basis suggests many interesting possibilities. Histology, as such, is not a science; it only becomes science when it considers the structures in the light of development, and the physiologic or biologic meaning. Whether histology, when based on embryology, will alone lead father in this direction is doubtful, as it must not be forgotten that embryonic histology is, practically, also only descriptive. The different stages in the structure of the tissue can be determined only by their structure; and that is not the final question, for the question of the total biologic change and differentiation that occurs, and of its nature, remains to be answered. The time has not arrived when this can be done, and therefore histology based on embryology must necessarily remain for a long time a one-sided study—that is only descriptive. Such a histology can not be more than a combination of various histologic characters in various periods of development. The intime nature of these changes can not be determined by it. It may be interesting to follow up microscopically the development of a tissue or organ, but this will not alone do anything to further our knowledge of the causative factors. There is no doubt that the relation of embryologic to mature structures is of interest, but that it makes histology a matter greatly superior to what it was before, can not be accepted. Lewis's book certainly is interesting, but for histologists those portions only that are Stoehr's can be regarded as binding; the rest may be to a degree an introduction to embryology, but not an advance in the study of histology. The history of natural science shows the first steps leading to the advancement of knowledge were purely anatomic and morphologic. They are still the bases of all our biologic work. The point is that histology has not yet solved all the problems of histologic structure, and that much more work, particularly in the histologic line, is needed to reach a final definite basis of further correlations to other problems. We are at the present time too ignorant of the meaning of structure not to feel the compelling necessity to analyze this structure to the utmost possible degree. Late discoveries in this line have changed the whole aspect of structural conditions to a great degree, and it is very probable that even the basic factor of histology, the cell, will yield to other interpretations. To make histology, whose purpose is to demonstrate only structural conditions by comparison with embryologic stages of the equivalent structures, a wider field of study and understanding is, at the present time, as said before, a one-sided procedure, for we are not far enough advanced to go much beyond the structure of the object. Anatomy and morphology, macro- and microscopic, are still the tangible bases of many biologic problems; to these, too, belong many biologic processes,—immunity, anaphylaxis, etc.,—in which only the morphologic changes are histologically comprehended; the intimate nature of the process is unknown.

FOODS AND ADULTERATION.—By Harvey W. Wiley, M. D. P. Blakiston's Sons & Co., Philadelphia. 1907.

The character of this important book is such that it is adapted not only to the use of the scientist and the manufacturer of foodstuffs, but also to the consumer. It deals with explicit discussion of the methods and manufacture, the food values, standards of purity, regulations for inspection, simple tests for adulteration, effects of storage, and other features of the subject. In glancing over its contents the impression is given that the book furnishes an impartial

and logical consideration of the role of the problem of pure food. The notions commonly held are based only on habit and experience; to bring them together in their entirety, as a subject of scientific study and exact work, and thus giving the means for definite rules and regulations, is the purpose of Wiley's book. Although the positiveness of statements on certain questions may not be fully justified by definite evidence, it is a valuable proof of the earnestness with which the book has been composed. To the chemist and biologist it is a source of many suggestions concerning obscure questions. Even for physiology much material of great interest is to be found. The book is well written and many excellent illustrations enhance its interest to the reader.

Diseases of the Spinal Cord.—By R. T. Williamson, M. D. (Lond.), F. R. C. P., Assistant Physician, Royal Infirmary, and Lecturer in Medicine, Victoria University, Manchester. Oxford Medical Publications, London. 1908.

This book is based upon notes and lectures which have been given by the author at the Manchester Medical School during the last fifteen years. The book is designed to be a text-book and an introduction to the subject of diseases of the spinal cord. As such it performs its service with credit. It is especially valuable from the standpoint of the student on account of its clear clinical description, its more or less dogmatic manner of stating things and its clear diagrams. The illustrations pertaining to the pathology of diseases of the cord are not nearly so well selected, and many of them are badly reproduced. The fact that they are taken from the author's own specimens and not copied from some other text-book, is worthy of comment and praise. Some of the diagrams, however, are rather remarkable. For example, figure 81, a diagram to show positions in which spinal tumors may develop, is extremely ingenious. The series of diagrams to illustrate myelitis are so planned that the student can get, at a glimpse, the points brought out in the text. Some of the pathological descriptions are vague; for example, the pathology of multiple sclerosis leaves the reader in considerable doubt as to the author's own point of view in the matter.

The chapter on Tumors of the Spinal Cord is not very satisfactory for the reason that advantage is not taken of some of the recent literature, notably that of Oppenheim and Bruns. There is, however, less reason to criticize omissions of this kind than there is cause to praise the clear description, the precise manner of statement and the general directness of style. These make for a successful text-book which will enable the student to become intimate with the known facts relating to diseases of the spinal cord. Inasmuch as the text-book aims to fulfill the needs of a student and as an introduction to the subject, it can be said that it amply fulfills its purpose. That most of the information contained in this book can be readily acquired in the larger text-books on neurology, is in no way a criticism. It is much more convenient, frequently, to have so large a subject as diseases of the nervous system, divided into component parts, and the fact that one part is treated as a distinct subject by one man, lends a certain novelty not to be found in the larger treatises. This book can be unhesitatingly recommended to students and practitioners, and it contains, moreover, much that may interest and broaden the knowledge of the specialist.

A Text-Book of Nervous Diseases and Psychiatry. For the Use of Students and Practitioners of Medicine.—By Charles L. Dana, A. M., M. D., LL.D. Seventh Edition. William Wood & Co., New York. 1908.

The seventh edition of Dana's text-book is in some respects a marked improvement on the former editions. The general scheme of the book is much the same, expressing as it does the personal views of this well-known neurologist. A subject deserving mention is the Sensory Neuroses of the Cerebrospinal Nerves (Chapter X). This includes a description of paresthesias, neuralgias and affections of the cranial nerves. Just why Dr. Dana includes all these under this title is not clearly evident, unless he is doing away altogether with the former conceptions of the term "Neuroses." At any rate the grouping together under the one head of sensory disturbances makes for clearness and compactness.

Dr. Dana's chapter on Progressive Muscular Atrophies is classified according to his own plan. This contains much of his later work, and certainly aids in making the subject clear; that is, as clear as it is possible to do with our present knowledge.

The defects of this book are in the main the defects of many books in neurology, which attempt to cover the whole subject within narrow limits. One is rather disappointed in the chapters devoted to therapy and the very general way in which treatment is oulined. The chapters on diseases of the mind are a distinct disappointment, chiefly for the reason that they are evidently written as an appendage to this book and not dignified with the proper space that they are entitled to.

On the whole we might say that Dana's text-book is one of the most satisfactory of the lesser text-books on neurology. It is perhaps better adapted to the student's needs than any other work in the English language. The book impresses one as having been written with the student's point of view constantly in mind. Too much praise can not be given to Dr. Dana's style and to the careful arrangement of his material. The make-up of the book is good, illustrations are effective and the diagrams are very helpful.

GESCHICHTE DER LARYNGOLOGIE AN DER UNIVERSITAET HEIDELBERG. Von Professor Dr. A. Jurasz. Verlag von Curt Kabitzsch. Wuerzburg. 1908. Mks. 3.

Resigning from the chair of laryngology, held by Jurasz for many years in the University of Heidelberg, he considers it his duty to give a clear account of the work done in this branch of medicine in that famous school of medical teaching. Incidentally he presents in this way a history of the development of laryngology as a specialty since the invention of the laryngoscope.

DIE KRANKHEITEN DER NASENSCHEIDEWAND. Von Dr. Leo Katz. Mit 8 Tafeln und 34 Abbildungen im Text. Verlag von Curt Kabitzsch. (A. Stuber's Verlag) in Wuerzburg. 1908. Mks. 6, 80.

This volume represents the first attempt in medical literature to deal exhaustively with all known diseases of the nasal septum. The subject is thoroughly covered in 12 chapters, each concluding with a bibliography on the special question considered in that chapter. Illustrations and colored plates are excellent.

DER MENSCHLICHE KOERPER IN SAGE, BRAUCH UND SPRICHWORT. Von Professor Karl Knortz, North Tarrytown, N. Y. 1909. Verlag von Curt Kabitzsch. Wuerzburg. Mk. 3, 20.

It is well known that many legends, proverbs and peculiar customs have special reference to the human body. To collect all these references and arrange them in anatomical order may seem an impossible and rather unnecessary task. Our fellow countryman in North Tarrytown has undertaken such a work, and undoubtedly has spent innumerable hours in collecting this immense material. As the result of his labor of love he presents us with a very interesting volume which not only makes attractive and amusing reading, but also must be regarded as an important contribution to ethnologic literature.

CONSUMPTION. Its Prevention and Cure Without Medicine, With Chapters on Sanitation and Prevention of Other Diseases. By Chas. H. Stanley Davis, M. D., Ph. D. Second Edition, pp. 218. New York. E. B. Treat & Co, 1908.

This is a clear and readable presentation of the modern hygienic treatment of tuberculosis, intended primarily for the layman, though the physician himself may find much of value in it. It is decidedly the sort of book to put into the patient's hands for self-instruction.

A MANUAL OF CLINICAL DIAGNOSIS. By James Campbell Todd, Ph. B., M. D. Illustrated. Pp. 319. Philadelphia and London: W. B. Saunders Co. 1908.

A brief but adequate compilation that will be found useful by those who desire an account of modern clinical laboratory methods in small compass.

PAIN, ITS CAUSATION AND DIAGNOSTIC SIGNIFICANCE IN INTERNAL DISEASES. By Dr. Rudolph Schmidt. Translated and edited by Karl M. Vogel, M. D., and Hans Zinsser, A. M., M. D. Pp. 326. Philadelphia and London: J. B. Lippincott Co.

In undertaking a systematic analysis of pain, Dr. Schmidt has performed a useful service. The great difficulties attending such an analysis hardly need to be emphasized to the general practitioner, who is so often called upon to interpret the subjective complaint in terms of the temperament and individuality of the patient. In fulfilling his task, the author has throughout tempered his deductions from actual pathologic processes with a careful critical consideration of the functional elements, which, in the phenomena of pain, so frequently cloud the clinical picture. The translators have added a chapter

embodying a brief presentation of Head's researches on referred pains and a series of diagrams showing some of the commoner seats of pain or tenderness in visceral disease.

Die Bedeutung der Langerhans' schen Inseln in ihrer Stellung zum uebrigen Pankreasgewebe und ihre Beziehung zum Diabetes. Von Dr. med. Manfred Fraenkel in Charlottenburg. Wuerzburger Abhandlungen aus dem Gesamtgebiet der praktischen Medizin. Wuerzburg. Curt Kabitzsch (A. Stuber's Verlag). 1908.

The islands of Langerhans by means of their internal secretion play an important role in carbohydrate metabolism and, if diseased or functionally impaired, in the production of diabetes. They are however not independent organs, merely associated anatomically with the pancreas but arise originally from pancreatic glandular tissue and if destroyed may, to a certain extent, be regenerated from it.

Beitraege zur Klinik der Tuberkulose. Band IX., Heft 1, 2, 3. Wuerzburg. Curt Kabitzsch (A. Stuber's Verlag). 1908.

This journal with its excellent clinical, diagnostic and therapeutic articles continues to justify its existence. As is natural, the lion's share of the volume is taken up with discussion of the new tuberculin diagnostic methods. An extended examination of these methods by Wolff-Eisner, with which the volume opens, deserves special mention.

Beitraege zur Klinik der Tuberkulose und specifischen Tuberkulose-Forschung. Band X., Heft 1, 2, 3,4. Wuerzburg. Curt Kabitzsch (A. Stuber's Verlag). 1908.

Like its predecessors the tenth volume of this journal continues to offer a number of excellent articles. The therapeutic and diagnostic use of tuberculin occupies a large share of its space but several articles on x rays diagnosis deserve attention.

Specielle Diagnose der Inneren Krankheiten. Ein Handbuch fuer Aertze und Studierende, nach Vorlesungen bearbeitet von Dr. Wilhelm v. Leube. Siebente neu bearbeitete Auflage I. Band, 1904; II. Band, 1908. Leipzig. Verlag von F. C. W. Vogel.

Those familiar with Prof. von Leube's great work on clinical diagnosis will welcome the new seventh edition of which the second volume has just appeared. Few books in the entire realm of medicine combine so strikingly a typical German thoroughness and completeness with a charm of style that makes easy and pleasant reading. Among many excellent features, attention should perhaps be especially called to the chapters on diseases of the nervous system. Nowhere else, will the general practitioner find a clearer or more trustworthy guide through this to him so tangled and obscure a wilderness. It is to be hoped that the book will soon find a competent translator.

Surgical Emergencies. By Percy Sargeant, M. A., M. B., B. C., F. R. C. S., Surgeon to Out-Patients, St. Thomas's Hospital, etc., London. 1907. Oxford University Press, American Branch, 1907.

A fairly complete handy guide, which gives a concise account of the methods of treatment of various conditions that are classed as emergencies. The classification of injuries and the indication and methods of treatment are along the lines practiced by the best surgeons and are characterized throughout by their simplicity.

Prostatic Enlargement. By Cuthbert S. Wallace, M. B., B. S., F. R. S. C., Surgeon to the East London Hospital for Children, etc., London. 1907. Oxford University Press, American Branch, 1907.

The author has given us a book which covers in a satisfactory way a field that has recently held much of our attention. The operative treatment of the enlarged gland is taken up largely from the view-point held in England where the suprapubic route is most often employed. It is certain that the author fails to put the case strong enough to alter the views of one who has had experience with the perineal route, and the admission that there are some cases where the suprapubic route is inadequate makes the position much weaker. But it is true that if the choice of operation depended upon the descriptions of methods as found in this book, only one would be used, because the perineal operation, with which the author evidently has had little experience, receives but slight attention.

CLINICAL LECTURES AND ADDRESSES ON SURGERY. By C. B. Lockwood, Surgeon to St. Bartholomew's Hospital, London. Oxford University Press, American Branch, 1907.

This is the second edition of this collection, which speaks for the reception the volume has received. There is no attempt to make a treatise, but the lectures have been reprinted as they were given, and deal with unrelated subjects. The teacher of clinical surgery will get many valuable suggestions from the introductory lecture, and the lectures on "Clinical Reasoning," and "Essentials of a Diagnosis." Models of form, they possess an interest and charm which carry one through them with pleasure, for rarely does one encounter such a finished example of the teacher's art. Other chapters make this an instructive collection, in which information is imparted in a pleasant colloquial form by an observer who has had much experience and has profited much from it.

TABER'S POCKET ENCYCLOPEDIC MEDICAL DICTIONARY. By C. W. Taber and Dr. Nicholas Senn, the late famous surgeon. A new departure in a medical dictionary. All important subjects defined encyclopedically. From one to three pages given to vital topics. Anatomy, physiology, therapeutics, dietetics, hygiene, operations and thousands of other subjects treated. Cross-indexed. Illustrated. 418 pages. Flexible black leather, gold stamping, gilt edges. $1.50.

THE PHYSICIAN'S VISITING LIST FOR 1909. Philadelphia: P. Blakiston's Son & Co. Price $1.00.

For the last fifty-seven years this has been the recognized visiting list for the American physician. No more practical arrangement could be conceived, and the fact that the list is adapted for 25, 50, 75 or 100 patients per day makes this book useful to all practitioners.

TEXT-BOOK OF OPHTHALMOLOGY. By Dr. Ernst Fuchs, Professor of Ophthalmology in the University of Vienna. Authorized translation from the Eleventh Revised and greatly enlarged German Edition, with numerous additions, by Alexander Duane, M. D., Surgeon Ophthalmic and Aural Institute, New York. With 441 illustrations. J. B. Lippincott Co., Philadelphia and London.

The necessity of a new English edition of Fuchs' well-known text-book is evident from the fact that four German editions have been issued since the last English edition appeared. The edition just published has been thoroughly revised and brought up to date in all its parts, so that it presents an excellent summary of ophthalmological science as we know it today. The most marked changes are found in the sections on diseases of the cornea, the pathology of iritis, sympathetic ophthalmia, chorioditis, glaucoma, diseases of the optic nerve, the disorders of motility, diseases of the orbit and refraction.

It is unnecessary to state that the translator, Dr. Duane, has done his work with extraordinary fidelity to the spirit of the original, and presents a text of excellent English free from reminiscence of the native idiom. He should also be praised for his exact appreciation of the deficiencies of the original, from the point of view especially of American ophthalmologists, and the tact with which he has supplied these deficiencies.